AMERICAN AGRICULTURIST.

Agriculture is the most healthy, the most useful, and the most noble employment of man.—WASHINGTON.

VOL. IX. NEW YORK, SEPTEMBER, 1850. NO. IX.

A. B. ALLEN & R. L. ALLEN, *Editors.* C. M. SAXTON & E. BLANCHARD, *Publishers.*

THE

AMERICAN AGRICULTURIST

AND

FARMERS' CABINET.

PUBLISHED ON THE FIRST OF EVERY MONTH

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C. M. SAXTON & E. BLANCHARD, 120 FULTON st. N. Y.

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CONTENTS OF SEPTEMBER NUMBER.

Connecticut Farming—Reverse of the Picture, Solon Robinson	266
Live Posts—Wire Fences, etc., Z * * *; To Restore Pear Trees, Hawley B. Rogers	267
Agricultural Geology	268
Farming of Robert Bakewell; Preservation of Pumpkins; Bugs on Vines	269
Roads in Lower Virginia, A Traveller; The Greyhound; Is it Possible that the Earth can Produce any Vegetable Spontaneously, Delaware	270
Yankee Farming, No. 11, Sergeant Teltrue	271
Seeding Timothy: Powerful Effects of Guano; Southern Cornsheller; Farm of Mr. Fountain, A. Sherman	273
Etrurian Wheat, E. Cornell; Substitutes for Grass	274
Topping Corn and Stripping off its Leaves, J. G. C.; Results from Subsoil Plowing, J. B.; Companions of Civilisation	275
Fattening Hogs, A. E. Ernest; The Sheep Bot, Egrec; Mulching, or Gurneyism, as Applied to Fruit Trees	276
Reasons for Keeping the Best Breeds of Stock, G.	277
Currants; The Last Crops; Reclaiming Lands; The California White Oak, Homer Holland; Irrigation—No. 3	278
Gooseberries; Dixon's Patent for Firing Kilns for Pottery, &c.	279
Gathering Seeds	280
Third Duke of Cambridge	281
Virginia Farming, A Virginian; Selection of Seed Corn	282
The Sense of Smell, S. R.	283
Review of the July Number of the Agriculturist, Reviewer	284
Failure of the Clover Crop	286
Cochin-China Fowls, J. C. Taylor	287
New Mode of Making Butter—Boiled Butter	288
New Fruit Gatherer; Washing Woolen Clothes; Mr. Robinson's Tour, No. 21, Solon Robinson	289
Mr. Lewis G. Morris in England; Rice Threshers; Crossing the Pheasant with the Domestic Fowl; To Clean Brass Kettles	290
LADIES' DEPARTMENT: To Make Nudles—an Excellent Substitute for Vermicelli, M.; On Drying Plants so as to Preserve their Colors; A Capital Tomato Recipe; To Make Hens Lay; To Toughen New Earthen Ware; Filling Beds	291
Foreign Agricultural News	292
Editors' Table	293
Review of the Markets	294

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AGRICULTURAL GEOLOGY.—No. 4.

In adverting to clay-slate rock and soils, at the close of our last number, (p, 172,) we approach a series of minerals, which, for character and extent, differ exceedingly on this continent, from any of the like in Europe; and, as when treating of this series, we touch upon those which underlie the greater part of this state, and which have, on that account, received the name of the "New-York system" of rocks, the necessity of dealing with it somewhat fully is imposed upon us.

In western Europe, the rocks which lie above the mica slate, and below the old red sandstone, are comparatively well marked, and easily recognised in their general appearance. They consist of a series of slates and flag stones, sometimes dark colored and soft, and occasionally splitting irregularly, sometimes affording beautifully thin and perfect slates, of great superficial dimensions. Such are the slates from Bangor, in Wales, and Cumberland, in England. These are generally the lowest beds, those higher up losing that useful property called cleavage. The beds lying over those which furnish these slates, generally yield good flag stones. Above these, lie beds of stone mostly of a flinty and silicious character, which still have the slaty cleavage, and yield good corn-mill and grindstones. This series of rocks is the first which shows any trace of life having existed at the time it was formed. The traces are the remains of stalks of corals, a few scales of fish, and some thin fibres of seaweed of simple form. They are distinguished from the rock systems previously described, in not presenting well-marked evidences of having been at one time melted, but rather show that they constituted the bottom of an ocean of great depth, in which the clay, mud, and sand had ample time to settle down evenly in alternate layers, and going on for a long period of time, and occupying a great extent of sea bottom, and shell fish, corals, or other animals dying during the period, would become imbedded in the mass. Thus, kept in some degree from the decomposing action of the air and water, they would be handed down to us as the remains of the inhabitants of a world in times long gone by.

After the lowest beds were deposited, and before the uppermost or last were settled down, volcanic action and upheaval occurred from below, bending, cracking, and elevating the oldest beds at various angles. Hence, it is, that when the whole was finally upraised from the ocean deep, these upheavals appeared as very high and rugged hills with sharp peaks and shoulders, the characteristics of a slate country. The bending and cracking were produced by melted greenstone and trap, endeavoring to find a vent upwards, and forcing all above before it. It cooled down, however, before passing through the thickness of slate, and hence forms the walls or dykes, or trap, or greenstone met with in slate. The greenstone brought up metallic, copper and tin, in great abundance, and deposited them in the sides of the dykes; the oldest beds of slate being those rocks where these two metals are found most abundant. The upper beds of clay slate have not these metals, and but few dykes of greenstone; but in their place, beds of granular, white limestone occur, with veins of galena, or lead ore. The topmost beds of the series contain no metals, and consist of sandstone and shaly slate, with beds of coralline and shelly limestone of a dark color. Occasionally, beds of pebbles cemented by paste, into a rock, and termed conglomerate, are met with, until at last we come to these beds of dark-red sandstone, of which our city churches are built, and which is known as the old red sandstone. Here terminates the slate rocks. They are not equally well exhibited in every country. Thus the lowest or metallic beds are better developed in England than here, the middle series in central Europe, while the topmost series, or those which have no metal, are best seen in those states, being close to the sandstone beds, it partakes much of that character, and has lost, to some extent, the slaty cleavage. Such rocks were termed *grauwacke*, in Europe, but from their extent and importance in this state, they have been called the New-York system of rocks. They occupy almost the whole centre and west of the state, and are the most fertile spots known. The salines, the water limes, and the gypsum beds belong to this class of rocks, and they stretch from Lake Ontario to the Pennsylvania border, where they dip down south under the old red sandstone of the border counties. The various beds described have received names from the localities where the best-marked specimens were found. Thus Potsdam sandstone, Trenton limestone, Utica slate, Hudson-River slate, Medina sandstone, Niagara group, Onondaga salt group, Portage and Chemung slates are familiar names.

The inclination of the New-York system of rocks is very slight in the central counties, lying at an angle sloping south eight or ten degrees; hence there is but little inequality of the ground, no mountain chains, and the land favorably disposed for tillage. It is different in the east of this state, as along the Hudson River, where the earlier deposited beds of slate lie on primary rocks; their upheavals are abundant, and the land too stony and rugged for profitable cultivation. Again, along the Pennsylvania line, the newest beds are found joining the sandstone, and these, also, have been upraised to a high angle, and produce the picturesque scenery along the Erie Railroad. The soil of this extensive tract of country is as varied as the rock itself. Sometimes it is altogether derived from the slate rock, and then its character is a stiff clay; but this only occurs in a few places, and its general composition varies from a loose sand to a marly clay. How comes this difference of soil?

We must recollect that after the rocks were deposited and consolidated, they lay underneath the deep water of the sea, with a strong current flowing southerly, tending a little eastward. If any soil ever formed on the surface of these rocks, it was swept away by the force of the

current, and carried south, to be spread over other rocks, and the sand and gravel which the current carried along, were spread evenly in some places, and in sand or gravel hills in other places, over the whole slaty bottom. Since then, it has been silently raised up to become dry land, carrying its sandy bottom up along with it; hence it is that so much of the slate district is destitute of fine clay, and the soil bears no relation to the rock below, because not derived from it, but from some rock perhaps 50 or 100 miles more northward. The clays of the Highlands are found in Long Island, and the water lime and gypsum rocks, forms the transported soil of part of Cayuga, Seneca, and Tompkins counties. In some places, the slate rock has decomposed readily, and mixing with the transported sands which overlie the rock, forms a loamy mixture of great fertility. Most of the soil of Seneca county is of this character.

FARMING OF ROBERT BAKEWELL.

The celebrated Mr. Robert Bakewell, of Dishly, Leicestershire, and the founder of the New-Leicestershire sheep, used to tell an anecdote with exceeding high glee, of a farmer, not only of the olden school, but of the golden times.

This farmer, who owned and occupied one thousand acres of land, had three daughters. When his eldest daughter married, he gave her one quarter of his land for her portion, but no money; and he found by a little more speed, and a little better management, the produce of his farm did not decrease. When his second daughter married, he gave her one third of the remaining land, for her portion, but no money. He then set to work, and began to grub up his furze and fern, and plow up what he called his poor, dry, furze land, even when the furze covered, in some closes, nearly half the land. After giving half his land away to two of his daughters, to his great surprise, he found that the produce increased—he made more money, because his new broken-up furze land, brought excessive crops, and at the same time, he farmed the whole of his land better; for he employed three times more laborers upon it; he rose two hours sooner in the morning; had no more dead fallows once in three years, instead of which he got two green crops in one year, and ate them upon the land. A garden never requires a dead fallow. But the great advantage was, that he got the same money to manage five hundred acres as he had to manage the one thousand acres. Therefore, he laid out double the money upon the land. When his third and last daughter married, he gave her two hundred and fifty acres, or half which remained, for her portion, and no money. He then found that he had the same money to farm one quarter of the land, as he had at first, to farm the whole.

He, (Mr. Bakewell,) began to ask himself a few questions, and set his wits to work how he was to make as much of 250 acres, as he had done of one thousand acres. He then paid off his bailiff, who weighed twenty stones, rose with the lark, in the long days, and went to bed with the lamb—he got as much more work done for his money—he made his servants, laborers, and horses move faster—broke them from their, snail's pace—and found that the eye of the master quickened the pace of the servant. He saw the beginning and ending of everything; and to his servants and laborers, instead of saying, "Go and do it," he said to them, "Let us go, my boys, and do it." Between come and go, he found a great difference. He grubbed up the whole of his furze and ferns, and then plowed the whole of his poor grass land up, and converted a great deal of corn into meat, for sake of the manure, and he preserved his black water (the essence of manure); cut his hedges down, which had not been plashed for forty or fifty years; straightened his zig fences, cut his water courses straight, and gained a deal of land by doing so; made dams and sluices, and irrigated all the land he could; he grubbed up many of his hedges and borders, covered with bushes, in some places from ten to fourteen yards in width, some more in his small closes, some not wider than streets; and threw three, four, five, and six closes into one. He found out that, instead of growing white-thorn hedges, and haws to feed foreign birds in the winter, he could grow food for man, instead of migratory birds. After all his improvements, he grew more, and made more of two hundred and fifty acres, than he did from one thousand; at the same time, he found out that half of England, at that time, was not cultivated, for want of means to cultivate it with. "I let him rams, and sold him long-horned bulls," said Mr. Bakewell, "and told him the real value of labor, both in doors and out, and what ought to be done with a certain number of men, oxen, and horses, within a given time. I taught him to sow less, and plow better—that there were limits and measures in all things—and that the husbandman ought to be stronger than the farm. I told him how to make hot land colder, and cold land hotter, light land stiffer, and stiff land lighter. I soon caused him to shake off all his old, deep-rooted prejudices, and I grafted new ones in their places. I told him not to breed inferior cattle, sheep, nor horses, but the best of each kind, for the best consumed no more than the worst. My friend became a new man in his old age, and died rich."—*Agricultural Gazette.*

Preservation of Pumpkins through the greater part of the winter, if sound and well ripened, is easily attained, by stowing them in a mow of dry hay or straw, or placing on a barn floor and covering with any light forage. A dry cellar will frequently keep them sound; but these are usually too moist for this purpose. They ought occasionally to be looked after, and any showing evidence of incipient decay, should be immediately used. All the partially ripe, small, and imperfect should be fed soon after taking from the field.

Bugs on Vines.—Sprinkle them with urine. If too strong, it will kill the vines as well as the bugs. A moderate dose, diluted with water, will drive off the bugs and make the vines grow rapidly.

ROADS IN LOWER VIRGINIA.

No improvement in the appearance of a country has more effect upon the mind of a traveller than good roads. Not having yet travelled all over the United States, I cannot speak of my own certain knowledge, but I believe that no section, whether east, west, north, or south, can beat Lower Virginia in roads. As a general rule, I think it may be set down as an incontrovertible fact, that they are the most neglected part of creation. Worn down by long use and washing rains into channels, it has become such a task to change the shape of them from concave to convex, that it is never attempted; and what little work is done upon them seems to have called forth all the native energies of negro ingenuity to make bad worse.

The most common method of stopping a gully or filling a mud hole is, to put a little green pine brush in it, which has a durability fully equal to fresh fish in August. The dirt from the ditches upon each side, instead of being rounded up in the middle, to shed off the water, is almost invariably piled along the edge of the ditch, so that the water is dammed in the travelled track. As far as a plow and road scraper are concerned, upon the public highway, who ever saw such a wonder in that part of the state? "I pause for a reply.

A Traveller.

THE GREYHOUND.

The modern smooth-haired greyhound is a very elegant dog; remarkable for its extreme velocity, in which it is, we believe, superior to the rough-haired dogs of the olden time, though not to some of the modern rough greyhounds, in which a cross of the old rough breed, or Scottish deerhound prevails. No greyhounds used for the hare, equal in speed and endurance those of our island; and none, so improved of late years is the breed, equal them in symmetry; every action is light, easy, and elegant, yet firm and vigorous.

The greyhound is highly sensitive, and very good tempered; like the Irish wolf dog, it is peaceable and affectionate, and fierce only in the chase of its quarry, or when excited to combat. On one occasion only, have we ever seen a greyhound fight with another dog; and in that instance, the animal, a roughish brindle dog, was set upon a large dog of a mongrel mastiff breed, and forced to self-defence. Short, indeed, was the combat; in a few seconds, the aggressor sunk severely torn, and was taken away. Slim as those dogs are, their muscular powers are very great; like the race horse, they are compact, of iron muscle, and ivory bone, with no superfluous fat nor loose cellular tissue, and are consequently deceptive to the eye, which is, in general, accustomed to see strength conjoined with massiveness. Yet we have but to consider the chest, loins, and limbs of a greyhound, and regard the "tori" of the arms and thighs, to feel assured of the possession of great power. The smooth greyhound, or glaze hound of the older writers, follows exclusively by the eye—whereas all the old, rough breeds, could recover the track of the game by the powers of smell; but in the modern dog, every quality is sacrificed to fleetness, and certainly for sudden and violent bursts of exertion the present breed has never been equalled.

Many trials for ascertaining the speed of the greyhound have been undertaken, and Daniel's opinion seems to be on the whole, correct, viz., that on flat ground, a first-rate race horse would be superior to the greyhound; but, that in a hilly country, the greyhound would have the advantage. Much, however, in the latter case would depend upon the dog being habituated to hilly districts; for a greyhound, accustomed only to flat plains, though swifter on them than a Yorkshire greyhound, would yield to the latter in a hilly country. The hare and the greyhound seem to be well matched; the swiftness of both animals is astonishing, and a well-contested run is an animating sight. Daniel records the circumstance of a brace of greyhounds, in Lincolnshire, running a hare from her seat to where she was killed, a distance measuring in a straight line, upwards of four miles, in twelve minutes; but as there were a great many turns during the course, the actual distance was considerably more. The hare ran herself to death before the greyhounds touched her.—*Knight's History of the Dog.*

IS IT POSSIBLE THAT THE EARTH CAN PRODUCE ANY VEGETABLE SPONTANEOUSLY?

This is a question often suggested to the mind of cultivators from the fact that, under certain circumstances, new growths spring up almost miraculously. For instance, in cutting down a primeval forest and burning the timber, the "fire weed" grows at once, far remote from any other. An old field that has grown nothing but broom sedge for many years, on being dressed with lime, produces white clover, where it never grew before since the forest trees were cleared off. In dense forests of long-leaved pines, if that timber is cut off, it is succeeded by oak and hickory; but if that growth is then cut off, neither long-leaved pines nor oaks follow, but another kind of pine called "loblolly." But cultivate the land and "turn it out." and then comes the "old-field pine."

Grasses and weeds, unlike any in the vicinity, have often been known to grow from earth thrown out of ditches and wells.

Fire is often produced spontaneously. Now is it any more remarkable that the same "Creative Power" should produce vegetation spontaneously, notwithstanding the assertions of science that no plant can ever grow except from a seed of the same sort? May not all the elements, necessary to form the germ of a plant, be brought together by the operation of nature and thus *begin to grow* and become capable of reproduction by seed? To deny this, is to say that the same Power that first bade the plants grow, is no longer powerful nor able to produce anything that has not had a previous existence and produced seed and that which has laid dormant for unknown ages, without decay; and yet, it is equally as miraculous that such seeds

should have retained its vegetating power as it is that nature is able to produce a new plant.

It is believed by some persons, in this age of wonders, that even life can be produced artificially. True, of a very low grade, but still possessing life. It certainly is a subject not unworthy of scientific investigation, to inquire whether vegetation that sometimes appears to come upon the earth mysteriously, has not sprung from seed of its kind that has laid dormant for ages unknown, or whether the Power that created all things has not again been brought into exercise to beautify and replenish the earth, and thereby add to the comfort and happiness of man, if his preverse nature would allow him to see what a happy home this earth might be, if all were as earnestly disposed to cultivate the fruits of love and neighborly kindness as they are to plant thorns and thistles.

DELAWARE.

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Our correspondent above, seems to revive some of the conceits of the dark ages. The effort was made by the ingenious author of "Vestiges of Creation," but without success. The doctrine of *mutation*, or the change of one specific plant to another of a totally different species, as of wheat to chess, is exploded by all intelligent and careful minds. The greater absurdity of spontaneous creation, must of course follow. In this, no considerate mind for a moment calls in question the *omnipotence* of Deity; but while fully conceding this, we say conclusively, that Deity has *fixed*, and to a certain extent *known laws*, by which he governs the world, and this affair of spontaneous creation is not one of them.

YANKEE FARMING.—No. 11.

The Sausage Stuffer and Cutter.—In order that my readers may better understand what follows, I think it best to inform them it was only last spring, for the first time since A-gok-ne-quaw was settled, that any of our merchants, or rather storekeepers, as we call them, had sufficient enterprise, or could muster the courage to add a few improved agricultural implements to their otherwise excellent assortments of well selected seasonable goods. These were at once so deservedly appreciated by our best farmers, and sold so well, that it encouraged the merchants to keep on: and among other things procured last fall, was a stock of those highly useful little machines, sausage-meat cutters and sausage stuffers.

Happening in at one of the village stores, early in December, to lay in her winter stock of groceries, my wife was shown the above machines. She thought so highly of their labor-saving capabilities, that, notwithstanding the seemingly high price asked, she determined on purchasing them; for the cutting up of a considerable quantity of sausage meat every winter, with no other implement to perform the operation, than the common chopping knife, and then the only means to stuff it, a short round stick or the bare finger, renders sausage making one of the most disagreeable and laborious of household duties.

Well, shortly after the purchase of these little machines, my fresh-killed pork being ready, my wife and I sat down one fine frosty evening to make sausages. To give them their just dues, both cutter and stuffer worked to perfection, and enabled us to accomplish more in one hour, than we could do in a whole day without them. Just as we were in the midst of our operations, who should pop in quite unexpectedly upon us, for an evening visit, but our good neighbors, Uncle Sim, Aunt Nabby, the fair Molly, and both of the boys. Their curiosity was instantly excited by the array of things before them, and in order to gratify it, they solicited us to continue our employment. As the fine, even-cut meat rolled out of the box, and sausage link after link was drawn from the end of the stuffer, Uncle Sim cocked his eye with utter astonishment; Aunt Nabby drew in a long breath, and closely pressed her lean, sinewy mouth; Molly's eyes sparkled with delight at the facility of our operations, and the thought of what a light task she and her mother, too, might hope to have of it hereafter; while the boys stood by and chuckled somewhat greedily with the idea that sausages and gravy would henceforth be more plenty on their father's table.

"Wal, Miss Teltrue," said Uncle Sim, at length breaking the silence and smacking his lips, "now du say, what did them 'ere sassenger machines cost?" "The cutter," said my wife, "is of the best kind, Mr. Doolittle, and I paid ten dollars for it; though I could have got one with wooden, pins instead of iron, for half the money. But I preferred the best made, as unquestionably the cheapest in the end. The stuffers only differed half a dollar in the price, so I again chose the highest, and paid five dollars." "Ten dollars!" said Uncle Sim, with great surprise, and then raising himself up in his chair, "and five dollars! Why, how you du talk, Miss Teltrue; all that makes fifteen! and fifteen dollars is mor'n our whole fattin' shoats is all worth, and the swill tubs into the bargain. Who ever heered on sich a sum for sich little gimcracks? A body would think now-a-days a storekeeper had'nt no conscience to ask so much for nothin'. But may be 'tis a patent right. Wal, a patent righter, and a pedlar, and a lawyer, ought to be put all into one bag, and shook up together. What a purty mess they would make, heh? 'Birds of a feather all flock together,' the rampscullions. Wal, I guess they think sassenger meat when its chopped fine enough, is the rael Californy dust, and that the links is all goold bars, fresh melted down, and ready for shippin', this side up with care, the gonies. I tell you 'tis a downright, clean out and out extortion and no mistake, and I don't care who hears Simeon Doolittle say it, I snore." Here he brought his clinched fist emphatically down upon his knee, and I must confess I had never seen him more excited in a small matter. But the idea of touching his purse, generally, was apt to touch his sensibilities: though Uncle Sim could hardly be called a close man in the strict meaning of the term; it was rather a narrow-minded dislike on his part, at first, to pay for an improved im-

plement, however much it might facilitate labor or cheapen production.

Mr. Doolittle's illiberal tirade upon what my wife thought did not much concern him, roused her spunk a little, and like most women under similar circumstances, she was ready with a reply; so she answered pleasantly, at the same time rather positively, that considering the superior manner in which the machines were made, she did not think the price so very dear; nor did she believe that either the manufacturer or trader made large profits on them; and if they did, it was of small consequence to her; she never considered such matters in her purchases; the only question to her mind was, "Is this a profitable investment for me?" Decide this in the affirmative, and she bought it unhesitatingly. Now, it formerly took my husband and self about a fortnight, without these machines, to accomplish what we have done in a single day with them: so, reckening our time at fair wages, they are already paid for. Besides, it is so much less irksome to work with them, and they turn out the sausages so much more perfectly that I am offered half a cent a pound more for them than if made by hand; and recollect, Mr. Doolittle, this is only one season's performance. Now they will last several years, so that I reckon they will earn at least, five times their cost before we wear them out; thus, after all I think you will allow that I have made a good investment.

"Wal, may be as you say, Miss Teltrue," replied Uncle Sim, quite subdued in his tone, and apparently mollified in his feelings, "but you know the old sayin', 'stick to your parish church though your parson is a blockhead;' which I spose is as much as meanin,' du as your fathers have done afore you, for changes is'nt agreeable; howsomdever, we du change." "Yes," replied I, "witness your well-drained meadow last fall."* "Oh, Sargeant, that's nothin." But he was apparently highly pleased with my allusion, and proceded. "Wal, we du change sometimes, for good reason and profit; and if pork was on'y worth a shillin' a pound now, as it used to be, sasenger machines might do; but when its hard sellin' at sixpence, or at most sevenpence, it's quite another affair, as the man says in the spellin' book, when he found it was his bull gored his neighbor's ox, instead of his neighbor's bull gorin' hizzen. Wal, arter all, prehaps I'm wrong in my notions; what's done cheap is sometimes the dearest; the penny is well spent that saves ten; and 'tis more trouble to du ill, than to du well."

How many more proverbs Uncle Sim would have quoted, if suffered to go on, it is impossible for me to say, for his head seemed to be full of them, ready to be brought out upon all occasions; but Aunt Nabby had kept her tongue with great impatience till this moment, when seeing her husband becoming a little penitent, and somewhat more diffident in the dogmatic opinions, just expressed, she commenced with a volubility which I must confess I had rarely heard even her equal.

"Sartin true, Mr. Doolittle; but bull meat isn't pig meat, no, nor ox meat nother; though it makes good mince, it ain't no account in sassengers. Wal, won't this 'ere cutter do the mince meat as slick as the sassenger? And you be purty fond o' mince pies as well as sassengers, and the boys don't like 'em scace, I guess nother," she added, coaxingly playing her hand on his shoulder; "and fifteen dollars! Oh, my! It's a purty big sum that's sartin; but don't forgit the little tiny pig that could'nt keep up to the tothers when he was a suckin', and pined away, and got so weak he could'nt stand, he did. And would'nt he a died if I and Molly had'nt a saved him? Yes, sir-ee. Now answer me that, Mr. Doolittle, as you are a livin' man. And if we had'nt a saved him, and brought him up by hand, on sour buttermilk and biled tater parins, and house slops, and sich kind o' truck that aint nothin' except to waste, and would a bin thrown away, prehaps." But Aunt Nabby was too economical a housewife to do this in any event; she only wanted an argument to help out her case. "Wal, din'nt I and Molly do all this, I say, and more tu? And aint the little pig the biggest and fattest shoat now, this very day, of any in the pen? And won't the storekeeper give more for him than the sassenger cutter and stuffer will all come tu, and a nice new hat for yourself into the bargain, Mr. Doolittle, to go to sister Suzy's weddin', that is to be next new-year's day a comin'? And ef we on'y had the machines, I and Molly could cut all the meat and stuff the sassengers in a jiffin, and have plenty o' time to make our bran new gowns for the weddin', tu, without the mantermaker's help, which will also be a considerable savin'; and Miss Teltrue, as you heered her, says the sassengers look so much nicer, she is offered half a cent extra a pound for 'em Wal, now let's cal'late." And so Aunt Nabby commenced upon her fingers. "Wal, there's the big shoat—I mean the tiny pig that was—and a week's wages of the mantermaker saved, and the half cent more on the sassengers"—

"Jest you whist a bit now, mammy, won't you." said Uncle Sim, half coaxing and half peevishly, "and let somebody else put in a word, as the big cart said to the little creaking wagon; I never seed sich a tongue as yourn in all my born days; 'but as the bell is so is the clapper;' and ef you don't ding dong it fast enuf for your side of the argument, then I hain't no knowledge o' a controvarsy. Wal, I ain't goin to dispute your cal'lation, nor Miss Teltrue's nother; I've cyphered tu fur in 'rethmetic for all that; and may be as you say, mammy, 'tis a matter o' economy to get the sassenger machines; but then, there is sich a thing as goin' tu fast; and there's so many shickle shackles about the country that don't prove all they've bin cracked up to be by a long chalk, that I've got kind a skeary—'Hail Columby!' Howsomedever, as the Dutchman said, 'all things is possible; and a pig may larn to whistle, on'y he's a plamed ugly mout for it.'" At this grotesque idea of a pig's whistling, we all burst out laughing, which so tickled Uncle Sim, that he slapped

*See vol. viii., p. 61.

his thigh with delight, and exclaimed in a high pitch, "Wal, mammy, 'what's sace for goose is sace for gander;' so you shall have your way, and Molly tu. Now clear the coast, Sargeant, if you please, a minute, and let me and Bill take a lesson stuffin' sassengers; for I shall be ready with my own fresh pork next week, and I'll send right off to the storekeeper then for all the machinery.

Upon this I immediately gave place to my redoubtable neighbor, who took the sausage stuffer on his lap, while his tall, awkward son, got down on his knees before it, and slipped an intestine on to the point of the stuffer, ready to be stuffed. Uncle Sim now filled the barrel to the brim, for he was determined on a "heavy charge," as he expressed it. He then laid hold of the handle of the crank, while Bill held on the end of the intestine for the purpose of twisting it into links as fast as filled from the stuffer. Uncle Sim now sung out in an authoritative tone, not unlike that of the captain of our military company giving orders on a field day, "Make ready! Take aim! Fi-er!" Then giving the crank a strong, quick turn, at the same time throwing himself back on his chair the intestine unluckily slipped off the point of the stuffer, by this sudden jirk of Uncle Sim, and the whole charge of several pounds' weight of meat, shot with such force into Bill's face that it choked his mouth, half blinded his eyes, and nearly knocked him flat on the floor.

"Hello-a! Who's killed?" cried uncle Sim, rising with great dismay and anxiety depicted on his countenance, which was responded to by a hearty laugh from all the rest of us present, save the unfortunate Bill, whom we soon relieved from his uncomfortable pelting. Uncle Sim felt highly mortified when he found out the true state of the case; but we soon smoothed the matter over, and the residue of the evening passed pleasantly away. The "lesson," however, I am glad to add, was not without avail, for a better lot of sausages than he and aunt Nabby afterwards turned out, I never saw; and they brought quite as high a price at the village store, as my own. SERGEANT TELTRUE.

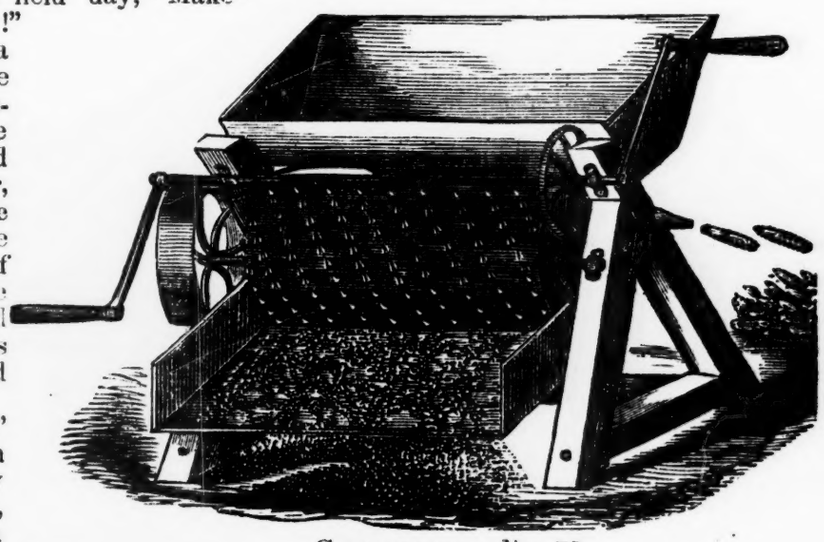
SEEDING TIMOTHY.—If you have not already sown your Timothy, let it be done as early as possible this month, at the rate of twelve quarts of seed to the acre. Be sure that the seed is sound and fresh; and, as a protection to the infant plants, sow, also, at the same time, a peck of buckwheat to each acre of ground. Such meadows as have begun to fail may be increased in their yield of hay, by sowing on them a peck of Timothy seed, with from five to ten bushels of wood ashes, and an equal quantity of lime per acre, afterwards harrowing and rolling it in.

POWERFUL EFFECTS OF GUANO.

A FRIEND has just mentioned an instance of the effects of an overdose of guano, quite disastrous to his crop. He had an obstinate, conceited, Scotch farmer, who persisted in sowing 700 pounds of Peruvian guano per acre, on a field just laid down to oats and grass, when expressly limited to 300 pounds. The result was such a rapid and luxuriant growth, that the oats were all lodged before they were three fourths grown. They were immediately cut for the double purpose of saving the fodder, and allowing the young grass the benefit of sun and air. Unfortunately, the continued wet weather which followed, disconcerted this only hope of preventing a total loss; the oats could not be cured, and their heavy swaths effectually smothered most of the young grass plants.

So much for an overdose of guano, and the disobedience of persons, to the intelligible and peremptory commands of their employers.

SOUTHERN CORNSHELLER.



CORNSHELLER.—FIG. 73.

THIS machine is well adapted for shelling Indian corn, and is suitable for large plantations. It may be worked by one or two men, or by horse power, and shell by manual labor about 300 bushels, and by horse power, about 700 bushels per day. It separates the corn from the cob, both of which are left unbroken.

FARM OF MR. FOUNTAIN.

IT is a generally-adopted principle that the prosperity, security, and perpetuation of republican governments depend more upon their agricultural, than any other, and indeed, all other interests blended. If this be so, no honorable means should be withheld that can tend to advance this most important branch of industry.

With no other motive than a desire to encourage a spirit of agricultural emulation which had already manifested itself in some portions of our country, I place at your disposal the statistics of the annual average receipts from the farm of Tyler Fountain, of Peekskill, New York,

as reported by himself. The farm contains 83 acres, 13 of which are wood and pasture:—

35 tons of hay,	$12.00	per ton,	$120
425 bushels corn,	62	" bu.	265
450 " oats,	40	" "	180
60 " rye,	75	" "	45
100 bbls. potatoes,	1.50	" bbl.	150
2,200 lbs. pork,	6	" lb.	132
Apples,			125
Profits on cattle sold,			60
" from 5 cows,			150
			$1,527
For hired labor,			$150
Total,			$1,377

He has now three acres of clover which he proposes to cut the last of this month, as suffering it to stand until June, would be impolitic, as it would be too coarse and rank for feed.

A SHERMAN.

Trumbull, Ct., May, 1850.

ETRURIAN WHEAT.

THE superiority of Etrurian wheat is so well established by six years' culture here, that I deem it proper to give some little account of it. Its history, so far as I am acquainted with it, is as follows:—

Six years ago, I was at Washington, and Mr. Ellsworth, then Commissioner of Patents, called my attention to a new variety of wheat from abroad, that he had for distribution. Its appearance was so attractive, that I obtained about one large spoonful of it, that I sent home and had carefully cultivated, from which I have obtained my present supply. Each crop has been equally successful. It has grown entirely free from chess, smut, rust, and weevil. The straw is stiff, and not subject to crinkle. Just previous to ripening, the straw assumes a beautiful purple color, which changes in ripening to a golden yellow. It is the bald variety, with a white or very light-yellow berry, inclosed sufficiently firm by the husk to prevent waste in harvesting, and not so tightly set as to thresh hard. It is very hardy to stand the winter, and grows as well in the wet and low lands, apparently, as on the more elevated and dryer grounds.

For flouring, this wheat is unsurpassed by any variety. It yields more pounds per bushel, measured, than any variety I know of, and the yield of flour is proportionably large. It promises fair to prove the most valuable variety of wheat that we have ever had in this section of the country.

E. CORNELL.

Ithica, July, 1850.

The sample sent us of the above wheat, is very fine, and justifies all the writer says of it; but whether it is superior to the white-flint wheat, we do not know. We have hitherto considered that the best kind grown in the United States. As experiments in a small way cost but little, we would advise our friends trying an acre or so of the Etrurian wheat, and should it suit their soil and climate, they could then cultivate it more extensively. We have it for sale at $2.50 per bushel.

On account of the fly and other causes, the culture of some of the choicest varieties of wheat has been given up in various localities, and a resort has been had to inferior kinds as more hardy. As these have been cultivated now several years, we presume the fly has partially disappeared. If so, the better kinds of wheat may again be introduced without danger. We would recommend, however, that they be tried sparingly at first.

SUBSTITUTES FOR GRASS.

THIS country is subject to seasons of drouth which nearly destroys the hope of the farmer to sustain his stock upon hay. The grass becomes so parched and dried up in our burning suns, that it cannot revive in time to make a mowing crop after the rain falls. Something, then, to be used as a substitute for hay, becomes of great importance.

As a universal substitute, perhaps millet deserves to be first named, though in some parts of the United States it is likely that other plants can be substituted to better advantage, to supply the loss of the hay-producing grasses. Millet, however, if sown upon dry ground, in June or July, with just rain enough to vegetate it, will mature in about eight weeks, and yield two or three tons of good fodder to the acre. As soon as the farmer finds his hay crop will be cut short by the drouth, he should plow up some most, available piece of land he has, and prepare the surface well with the harrow, and while the ground is as fresh as possible, sow one bushel of seed to the acre, and harrow in. When grown so that the seeds begin to ripen, it should be cut and cured in all respects like hay. As the stalk is coarse, it will be found of great advantage to use a good strawcutter, to cut up the whole before feeding; cattle are then very fond of it, and it is extremely nutritious.

At the same time you sow the millet, having prepared the ground in the same way, sow two bushels, or two and a half to the acre, of Indian corn, and cover it with a light plow or universal cultivator, with turning-share teeth. Be sure to cut this before frost, and bind it immediately with straw bands in small bundles and set it up to dry, in small shocks. If left to dry upon the ground, it is much injured by sun, dew, and rain, which have but little effect upon it if set up; and in that position it cures without any difficulty. This, also, if cut up by a strawcutter for feed, will be found good economy.

We have grown at least, six tons of good fodder to the acre, from corn sown on the 16th of July. If it is thickly sown, the stalks are so small, that if well cured, cattle eat them greedily, and certainly seem to thrive as well upon such feed as upon the best English hay.

Ruta bagas, or Swedish turnips, in such a season should by no means be neglected, as the tops, if the root does not come fully to perfection, serve as a good substitute for hay, while they remain green in the fall. For the same

porpose, round turnips should be sown more abundantly such a season than any other, as they serve well to save hay, particularly for a flock of sheep, until well into the winter. Above all things, if you have sheep, and are short of hay, do not neglect to sow a broad belt of rye, or wheat. This serves for fall, winter and spring feed, and perhaps is one of the best things you can possibly substitute for hay.

Another good substitute will be found in the somewhat neglected and often despised buckwheat. If cut as soon as some of the earliest seeds are ripe, and well cured, it makes an excellent substitute for hay, and all kinds of stock are very fond of it. The greatest objection to buckwheat, is, that it is an exhausting crop upon the land. But in our opinion, it is better to exhaust the land than it is to exhaust the cattle for want of sufficient nourishment. The greatest objection to buckwheat, as a substitute for hay, is, the difficulty and labor of curing it, but even this is better than curing hides on the fence, in the spring.

In some parts of the south, chess, or cheat, (bromus,) has been used as a substitute for hay or fodder, but we do not think it half so good a crop as grass and cow-pea vines, which certainly make a most excellent nutritious winter feed for horses, mules, and cattle.

Sheep need but little feeding where the pea vine grows luxuriantly.

TOPPING CORN AND STRIPPING OFF ITS LEAVES.

Having seen a wish expressed, at p. 182 in the eighth volume of the Agriculturist, that some of the fodder-pulling farmers would carefully try the experiment, and determine whether stripping off the leaves injures the product of the corn, I give the result of my experience on the subject. Although I never have made the experiment by weight nor measure, but by observation, and from topping and pulling the blades, and by cutting it up by the ground, I greatly prefer the former practice, which, if done at the proper time, will not injure the quality nor lessen the quantity of the corn.

A neighbor of mine cut up a part of his crop, by the ground, and I topped and stripped mine. My corn weighed 58 lbs. per bushel, while his weighed only 53 lbs. His corn was equally as ripe as mine, when the topping and cutting were performed, and of the same kind. We both sold for 50 cents per 56 lbs.

I would not have my corn cut up by the ground, if a man would do it for nothing and board himself. First, because it is a lazy man's plan, and a quick way to get down fodder, but double the work to secure it; and then it is worth but little or nothing, after it is secured. It must stand out until it is so weatherbeaten that there is only a little of the inside of the shocks that is fit for fodder.

Secondly, because it is almost impossible to keep the shocks standing upright, as the weight of the corn causes them to lean over, and heavy winds are sure to blow them down.

Thirdly, because in shucking the corn, a great many of the husks break off and are blown away.

Fourthly, because if you have not barn room to house the fodder, it is almost impossible to stack it so that it will keep.

Fifthly, because the corn is not worth one fourth so much as it would have been, if it had been topped, stripped of the husks, and put into the barn in dry weather.

I will now tell you when to top and strip your corn so as not to injure the grain, and how to do it so as to have good fodder, that will not be grinned at by old cows that have got no upper teeth. When the husks of the corn begin to turn of a yellowish color, and loosen up from the ear, and some of the lower blades begin to turn brown and the tassels of the most forward stalks also die, try the grain with your thumb nail, and if no milk shows itself, and the grain appears hard and glazed, you can muster all hands and go to cutting tops and pulling blades, which do in the following manner:—

Give to every third hand a good sharp shoe knife; tell him to cut the tops at the smooth joint just above the ear, and take two rows; throw four rows together flat on the ground; let them lie only one day; that is, tie up every day just before night, in bundles as large as a band made of two of the tops will tie conveniently; set three or four bunches together, around a hill of corn and tie all together by another band around the tassels. The other two hands, (boys suit best,) may pull off the blades from the ear downward, taking a row each, and should keep up with the toppers. They may stick the blades into the rows from the tops; that is, in two rows and then leave two, letting them remain in the hill two days, if the weather is fair, and then tie up in bundles, haul to the barnyard, or place of stacking. Give them two days of sun in the bundle; then stack or mow away. On rainy days, when the fodder is curing, throw the blades into the barn, or stack them up every night; or let your tops stand in the field two or three weeks, until by twisting the stalks, no sap will ooze out; then stack up or put into the barn, as suits you best. J. G. C.

Black-Swamp Farm, Kent Co., Del., 1850.

RESULTS FROM SUBSOIL PLOWING.

Mr. Jacques, of Rahway, New Jersey, speaking of subsoiling says: On 4½ acres of shelly land, he raised 530 bushels of corn, which was a much greater yield than he anticipated, taking the season, soil, and all into account.

The ground was prepared by plowing about four inches deep with a surface plow, which was as deep as the implement could be made to go, owing to the compactness of a shelly subsoil. The subsoil plow followed immediately after, loosening the earth some twelve inches deeper. Had he not made use of the subsoil plow, he thinks his crop would have proved a failure, as the roots could not have penetrated the subsoil, and consequently would have perished by the severe drouth. J. B.

Companions of Civilisation.—Crows, swallows, henhawks, foxes, rats, cockroaches, bedbugs, and some other *bugs*.

FATTENING HOGS.

For several years, I have paid some attention to fattening hogs, and find that they will thrive much faster on corn and sweet potatoes, or on peas and sweet potatoes, than they will on any one of these alone. I am well satisfied, also, that they will fatten much faster on boiled and raw food mixed, than they will on either, separate.

The year before last, I turned my hogs into a potato patch, and every evening fed them with corn. Under this treatment, the old hogs soon got very fat; but in the lot there were ten long-legged pigs not a year old, which, at the time I killed the old ones, were in as good order for running races, perhaps, as hogs could be put in for that purpose. I despaired of making them fat enough for bacon; but as I did not wish to keep them another year, I determined to try what effect cooked food would have on them, as I was well convinced that they could not be made fat on raw corn and potatoes; and with this view, I put them into a close pen, with sufficient pine straw in it to keep the hogs from the dirt. I then boiled sweet potatoes until they would mash up freely, into which I stirred corn meal until the whole became mush; and after feeding them on this, until they appeared satisfied, I gave them corn, then raw potatoes, and sometimes turnips, with the tops on. Under this treatment, they fattened faster than I had ever seen hogs before. In two weeks after I put them into the close pen, they were fat enough for any use, fatter than they ever could have been made on corn at that age, or on any one kind of food.

Hogs ought never to be put on a floor of plank, nor rails, if pine straw can be had; because they cannot be made comfortable on a floor of wood. Fill the pen two feet deep with pine straw, and when it becomes foul, put in more straw. In this way, the hogs can be made comfortable, and no part of the manure lost.

A. E. Ernest.

Macon, Ga., July, 1850.

THE SHEEP BOT.

As this is the season when sheep are worried by the bot fly, farmers should be reminded that now is the time, therefore, to see that they are kept from the sheep, or that "an ounce of prevention is better than a pound of cure."

This bot, (*Cephalemyia ovis*, of Harris,) is a fly very much the color of the one which deposits its eggs on the legs of horses, to which it appears to be somewhat allied, but smaller, and of a different shape. I have always seen it stated, when mention is made of this fly, that it deposits its eggs in the nose of the sheep, and under the article "bot," in Ree's Cyclopædia, we read that the eggs are doubtless deposited within the inner margin of the nostrils. But as far as I have examined, and I have caught and examined the bots themselves, I am convinced that not the *eggs*, but the very *live maggots* are deposited in, or on the nose of the sheep. I have caught the fly and instantly forced from it scores of live maggots, about one sixteenth of an inch in length. Under the microscope, they are seen to be a white grub, or maggot, with more or less black on the head, which extends in two black lines, for about one third its length, along its belly. They are very active when first forced from the fly, and crawl or jump an inch or more in a few seconds of time.

I could wish that some one would institute researches in the matter, and see if they meet with the same results; for if this fly really deposits maggots instead of eggs, it may prove to be something new to science, though it will effect not a whit, their victims, the sheep.

Remedies.—As a preventive, local application of tar to the noses of sheep has been highly recommended. This is undoubtedly good; but I think a better one is, to mix sulphur in small proportion with their salt, which, if given them daily, as it should be, will keep their noses constantly covered with more or less sulphur; whereas, tar soon dries and loses its repulsive odor, which is not the case with sulphur.

In wet climates, shepherds are much troubled with the maggot of the common green-blowing fly. They must look over their sheep every day; for wherever the fly finds a wet place in the wool, it deposits its eggs, which soon become maggots. If left alone a few days, they kill the sheep. In some parts of England, shepherds simply shear the wool where the maggots are, and then pour on them a gallon or two of clean, warm water. This done, they do not hesitate a moment to turn the sheep to pasture, so great is their confidence in their remedy. I have seen it tried repeatedly, and never knew it to fail.

Egrec.

Otsego Co., N. Y., July, 1850.

MULCHING, OR GURNEYISM, AS APPLIED TO FRUIT TREES.

We have lately seen several instances of this system, which should commend it to general adoption in all cases where there can be any hope of benefit from its use. The first was in an orchard consisting of nearly a thousand apple trees, belonging to Mr. L. F. Allen, on Grand Island. This orchard had been planted four or five years, on a hard clay soil, and during all the previous seasons, had made little growth nor scarcely borne an apple. Last spring, a large forkful of swamp grass was spread around the trunk of each tree, and the consequence has been, constant dampness on the surface of the ground beneath the hay, and a more vigorous growth than has ever before taken place, while almost every tree is covered with fruit. As the owner proposes giving us a full description of his orchards, and their treatment for this paper, we omit further notice of them for the present.

Another friend practises mulching with salt hay, which is much better for this purpose than the preceding. This contains an additional ingredient for attracting moisture in the salt combined with it. Many plants require shade and moisture, and when protected by this, will thrive and yield abundantly, which, if not thus protected would be entirely unproductive.

Another friend uses the shives, (the fine

woody portions,) of flax. By giving a thick covering of these to the ground around the trees, all the benefits of moisture are secured. There is a decided advantage in the use of this material, as it does not require to be raked off like hay and straw, on the approach of cold weather, to avoid harboring field mice or other vermin, which frequently commit great ravages among the trees during winter, when they have a hiding place near. The cutting of the hay or straw in a cutting machine, would prepare it equally well for this purpose, as the shives of flax. Tan bark, or sawdust are also useful; but it is better to have the latter discolored, so as to approach a dark brown. This color facilitates the radiation of heat, and the consequent formation of dews, both of which circumstances largely augment production.

REASONS FOR KEEPING THE BEST BREEDS OF STOCK.

Many reasons might be urged why farmers should keep only the best breeds of stock. While it is true that an abundance of food will apparently improve any breed, or at least hide their deformities, it is also true that the same food, fed to the same varieties of animals, though of different breeds, will contribute both to the beauty of the animal, and interest of the owner.

Early maturity and a disposition to take on fat are intimately connected with the shape of the animal. But few persons have the perseverance and discrimination to make a Bakewell; yet, scarcely a man can be found, who, if called upon to decide between two animals of different organisation, but will instinctively decide in favor of the round-barrelled, small-boned, deep-chested, in preference to the slab-sided, coarse-haired, rough-boned, narrow-chested, animals; and yet, with our certain knowledge of these facts, how few are there amongst us who make a reasonable application of the knowledge they possess. And if any one is found possessing a spirit of improvement, how often is it the case that he is beset with obstacles, and his efforts counteracted on every side. At all times through the summer, may be seen herds of cattle, hogs, &c., rambling in every direction, turned out by their owners to curse community, in their daily task of highway robbery and usurpation.

Suppose one of our citizens, at great cost, introduces a superior Durham bull. If he is permitted to pasture in fields adjoining the highway, to prevent evil associations is impossible, fences will be broken down; he is led off by these mauraders, and however docile by constitution he may be, these evil associations will soon make him ungovernable. The owner is soon compelled to fit him for the shambles. In the Empire State, the case supposed may not apply, but in Ohio, this is no fancy sketch, and notwithstanding the public may be benefitted by the introduction of the bull, in stamping his character or good points in his offspring, in the stock of the neighborhood, the owner's chagrin, disappointment, and loss of money have been the result. But how can this be remedied? I answer by disseminating the right kind of knowledge among the people. If every farmer could be induced to become a subscriber, and a reader of the American Agriculturist, The American Farmer, The Plow, Loom, and Anvil, The Ohio Cultivator, or any one of these, how soon would the aspect of these things be changed. The slumbering faculties would be aroused, a spirit of emulation in husbandry, in general, and an improvement in breeds of farm stock, in particular, would pave the way for the passage of a law prohibiting animals from running at large. And then, how quickly would our fields be dotted over with beautiful square-formed Durham cows! How soon would our long-nosed, razor-backed, slab-sided alligator land pikes, which some people call "hogs," give place to the Chinese, or some other decent breed of swine!

The evils resulting to the community from bad breeds of hogs, extend much further than is generally supposed. Almost every person, at one time or another, has had ocular demonstration of the hard feelings, heart tearings, open quarrels, and expensive lawsuits, engendered by the instrumentality of these trespassers, which husk our corn, and dig our potatoes for nothing; and, like the prince of darkness, are always "roaming about seeking what they may devour." But these evils, great as they may be, are not to be compared to the deleterious effects they have upon mankind. Man is a physiological being, and his physiological existence depends upon certain important principles or laws. Every one knows that man is an eating being. Did he cease to eat, he would soon cease to live. The food eaten is received into the stomach. This, in the process of digestion, is formed into chyle, and this, by the action of the oxygen of the atmosphere, inhaled by the lungs, is formed into blood; and from this blood is formed the bones, the sinews, the muscles, and tendons of the human frame. Consequently, whatever is eaten by man, and not thrown off as extraneous matter, becomes assimilated into the system, and becomes interwoven into the very texture and existence of man himself. Is it not, therefore, as clear as demonstration can make it, that if a man were fed exclusively for a sufficient length of time, on long-nosed alligators, or land pikes, he would eventually, so far as animal physiology is concerned, become "bone of their bone and flesh of their flesh?" He would be all hog, except the bristles. And when we consider the very intimate connection between mind and matter, is it not equally clear that this animal system, composed in whole or in part, of swine, will have a powerful influence in the formation of the character of the man? That the animal propensities will become stimulated, and will usurp the throne, and when reason is thus subjugated, the man is transformed from being a good member of civil society, to a complete Ishmaelite, whose hand will be against every man, and every man's hand against him. I desire no better index to the general character of a neighbor, for benevolence, peace, love, and good will, or their opposites, than the breed and appearance of the hogs, reared and eaten by the peo-

ple who reside there. And were I seeking a location, I would select some green spot in the desert of Sahara, rather than settle down among a people whose exclusive food was alligators or land pikes. G.

Moore's Salt Works, Ohio, 1850.

CURRANTS.

We have never before seen so fine a display of currants as we lately witnessed on a rich clay loam near the head of Grand Island, on the Niagara River. They were growing in a long single row, the ground on either side of which is used as a garden. The clusters were more abundant, and fuller, and the berries larger and sweeter than any we have ever seen or tasted. This was solely the effect of an open position and thorough cultivation on a good soil.

Currants have been worth, throughout the present season, in the New-York market, an average of about five cents per pound, and very scarce at that. We know of no more profitable crop than currants, at that price. If they should at any time become a drug in the market, or a surplus accrues, their value can be doubled besides paying for labor and sugar, by converting them into jelly, which always commands a ready sale at high prices. They also make an excellent wine when combined with sugar and properly treated.

THE LAST CROPS.—In the lower part of Virginia, wheat is badly injured by rust. In Western New York, the crop is an average one. In Ohio and Michigan, it was supposed to be much injured by the severe drouth in the spring. We are now assured that the grain is good, though the straw did not attain a full growth. In Northern Indiana and Illinois, the winter wheat came in very good; but unfortunately, there was comparatively, with spring wheat, but little sowed, and the latter is almost entirely destroyed by the "chinch bug," a small, dark-colored insect that has the smell of those common in bedsteads. The loss of this crop will cut off a considerable quantity from the usual receipts from Chicago. Crops in Wisconsin, Iowa, and Missouri, are reported good. Corn, in Michigan, Indiana, and Illinois, is very luxuriant. Grass, as good as need be.

RECLAIMING LAND.—We frequently meet with instances of reclaiming lands, that are quite refreshing in these days of speedy and general exhaustion. A gentleman has just brought us a few samples of Timothy grass, the heads of which are over nine inches long, and the stalks some four and a half to five feet. The land was purchased by its present owner, about three years since, and was then so poor, that a crop of corn, then raised upon the ground, was fed off in the field, being too worthless to harvest. Green manuring, (crops raised on the ground and turned in,) and the ordinary manures of the farm, have, in the short period above indicated, effectually resuscitated this worn-out land.

THE CALIFORNIA WHITE OAK.

ALLOW me to suggest to you, a notice of a noble white oak, growing extensively in the valley of the river Sacramento, California. This magnificent tree is noticed in Colonel Fremont's several expeditions, and more particularly in his recent memoir, explanatory of his map of Oregon and California (U. S. Senate Miscellany, No. 148, 1848, p. 17.) This is a new species of oak, attaining six feet in diameter, and often eighty feet in height, bearing an acorn one and a half, and frequently two inch in length, which Professor Torrey and Colonel Fremont have given the significant name of long-acorned oak (*Quercus longiglanda*).

This long-acorned oak will unquestionably flourish in the valley of the Connecticut River, from Middletown to Deerfield, and probably would succeed in the pine regions of New Jersey and Pennsylvania. I have this day ordered two bushels of acorns, through a Boston friend, and it occurs to me to write to you, who keep a seed store, to order more largely and early, to plant, for the timber. Our country is fast stripping off its woods, when our hills and plains will be as barren, bleak, and uninviting as Palestine or Arabia. The cabalistic commandment "to multiply and increase and *plant trees*," should be enjoined upon the consideration of all humane and intelligent communities and people.

The Indians of California make this acorn their dependence for food; but there will be no difficulty in procuring large quantities, at any time, even to plant late this fall, if ordered by next mail steamer, via Chargres.

HOMER HOLLAND.

Westfield, Mass., Feb., 1849.

IRRIGATION.—No. 3.

Fertilising Qualities of Water.—As a general rule, there is no water too bright, nor too full of impurities, if kept in motion, to be useless for the purposes of irrigation, as is evinced by the brilliant, chalky waters of the south of England, and the still greater fertilising effects of those surcharged with organic matter, in the Craigintinny meadows, near Edinburg. Hence it is that some of the most sagacious cultivators have come to the conclusion that the chief advantages of irrigation are attributable to the foreign substances, whether organic or inorganic, with which the water is impregnated. "The surest proofs," says Mr. Exeter, "of the good quality of water, as a manure, are the verdure of the margin of its streams, and the growth of strong cresses in the stream itself; and wherever these appearances are found, though the water be perfectly transparent, the occupier of the soil through which it flows, may depend, in general, on having a treasure." Again, those waters which breed the best fish are regarded by some, as the best adapted for watering meadows, while others are of the opinion, and among them, Sir Humphrey Davy, that most of the benefits of irrigation may be derived from water of any kind.

The fertilising properties of spring or river water are often owing to the crenic and apo-

crenic acids they contain. The former is a new organic acid found in all soils, and in mineral waters, as well as in the juices of plants. It was first discovered in the Porla Spring, by Berzelius, and was named by him, *crenic acid*, from the Greek word signifying a fountain or spring. It abounds more in subsoils than on the surface, owing to the solubility of some of its combinations, particularly those with lime and alkalies. It possesses highly fertilising properties, when neutralised by bases forming soluble salts. *Apocrenic acid*, is another new acid, first discovered, also, by Berzelius, in the waters of the Porla Spring. Its name signifies "from the crenic," as it is always found with that acid. It is one of the constant ingredients of the organic matter, or mould of soils, and is an active fertilising agent, being highly charged with nitrogen. It is found combined with protoxide of iron, forming bog-iron ore. Its combinations with bases are called "apo-crenates," some of which are highly soluble, as the apo-crenates of the alkalies, potash, soda, and ammonia; others, again, are difficultly soluble, as the apo-crenates of lime, alumina, manganese, and of the protoxide of iron. Alkalies decompose all the insoluble apocrenates, and form, with the acid, fertilising manures. [See Jackson's Final Report of the Geology of New Hampshire, pp. 365, 366.]

Melted snow, or rain water, it is well known, is a true manure, containing carbonic acid, a little ammonia, and a small amount of salts. Its fertilising effects on vegetation are too familiar with most of our readers to need repetition here.

Common river water usually contains more or less of the constituents of vegetable and animal bodies; and after rains, there is generally a greater proportion of these constituents than at other times, which is habitually largest when the source of the stream is in a cultivated country. Whenever the water has flowed over or through a calcareous or limy bed, it is generally found impregnated with carbonate of lime; and such water tends, in that respect, to ameliorate a soil in proportion, as though any, of the modifications of lime and charcoal were deficient; but where these are already in excess, water, charged with a limy sediment, should be withheld; while that impregnated with sand, clay, plaster of Paris, or particles of iron, would be beneficial.

But most of the benefits of irrigation, as before intimated, may be derived from any kind of water, (salt water excepted,) provided the soil be not already overcharged with the prevailing ingredients in the deposit, or sediment left by the water; and provided, on the other hand, that the ingredients of the soil and the ingredients of the deposit are not pernicious when combined. For instance, water containing ferruginous impregnations, (particles of iron,) tends to fertilise a calcareous or limy soil, while on a soil that does not effervesce with acids, which is one of the tests of the presence of lime, it is injurious. Again, calcareous waters, which are known by the earthy deposits they afford, when boiled, are of most benefit on silicious or flinty soils containing no appreciable amount of carbonate of lime.

Thus, if the farmer has a complete command over a neighboring quantity of water, containing a suitable alluvial deposit, he may render a cultivated level, or an incline plane, requiring rest and a cheap manure, extremely productive with comparatively little labor, by irrigating on the principles we have laid down.

GOOSEBERRIES.

This delicious fruit seldom attains perfection in this country owing to our dry, hot climate. In England and Scotland, where the climate is much cooler and moister, the gooseberry grows to a much larger size, and acquires a very fine flavor. Entire success has been secured in their cultivation in this country, by thoroughly cutting out the tops; manuring with saltpetre or common salt, mulching with salt hay, and by the use of other fertilisers.

One of our friends adopts the plan of rearing them in alternate rows between his grapevines, which are trained on wire trellis work. The gooseberry starts early, and has the full benefit of the sun, while the spring and early summer rains abound. When the sun has attained greater power, and the ground and atmosphere have become drier, the fresh manures from the vines, and their broad and thickly-clustering leaves afford ample protection to the gooseberries. This practice is so successful, that he assures us he has sent many bushels to market this season, from a few bushes, besides supplying his large family with all they could consume.

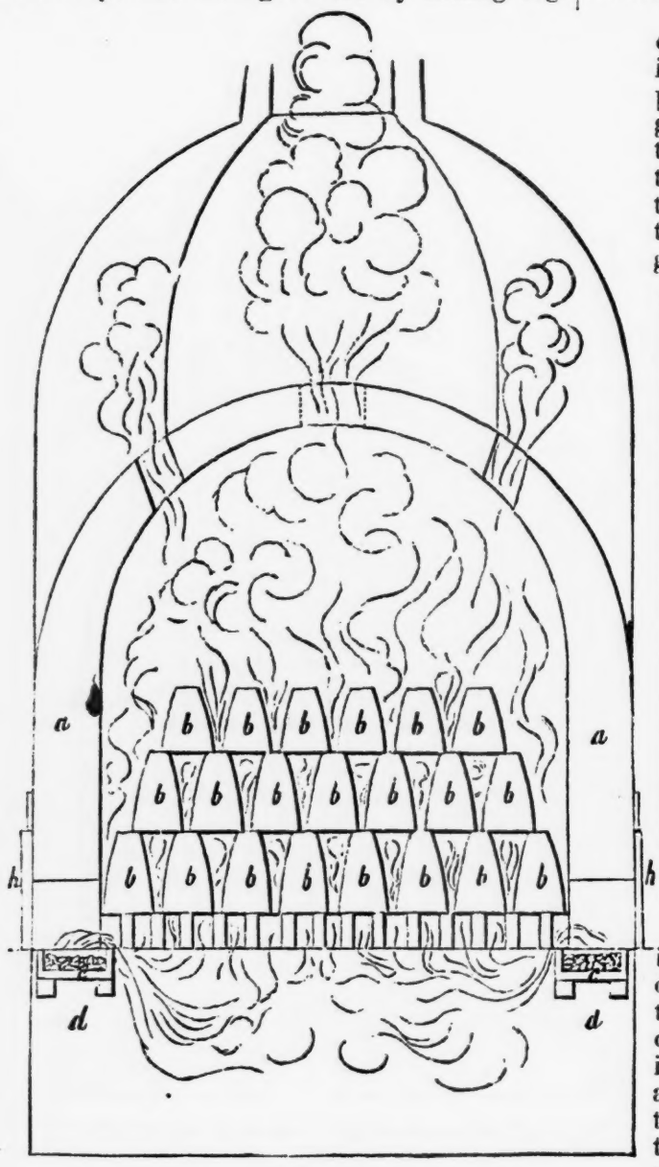
DIXON'S PATENT FOR FIRING KILNS FOR POTTERY, &c.

The following is a description of the principle, or character, which distinguishes the above improvement in firing kilns for baking pottery, bricks, draining tiles, etc., from all other things before known, and of the manner of making, constructing, and using the same, reference being had to the accompanying engravings, making part of the specification, in which fig. 74 is an elevation of the front of the kiln, and fig. 75 a horizontal section. The same letters indicate like parts in the figures.

Pottery and porcelain or other kinds of earthen ware, require a greatly diffused heat, on account of the amount of room occupied in the kiln. If the heat be not diffused, the articles near the fire; that is, at the bottom of the kiln, will be "overfired," or burned, and those at or near the top will be "slack burned," or not sufficiently baked. The only kinds of fuel heretofore used for this purpose, are wood and coal, the former being preferable, on account of the greater amount of flame produced by the combustion; but even with the kinds of wood that give the most flame, the lower part of the kiln will be "overfired," while the upper part is "slack burned."

In all kinds of fuel heretofore used for this purpose, after the combustion has progressed sufficiently to have distilled out the volatile parts, there remains in the furnace a mass of incandescent coals, which give out an intense, but not a diffused heat, and overfires the lower part of the kiln.

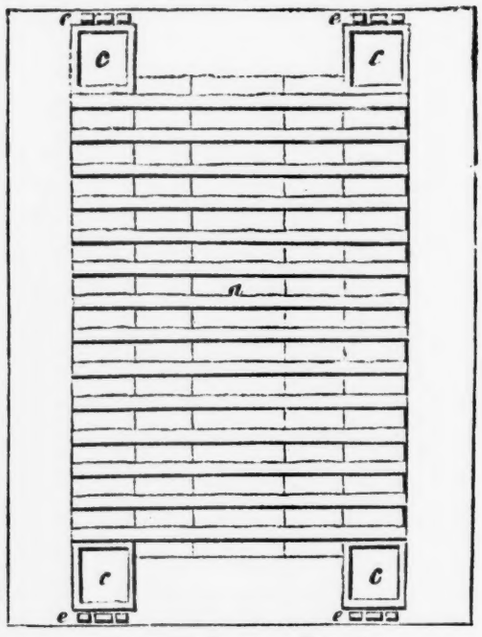
In the accompanying drawings, *a*, *a*, &c., represent the kiln, and *b*, *b*, &c., the articles of ware stacked up in it to be baked, with the flue spaces formed thereby for the passage of the flame and other products of combustion around them. At the bottom of the kiln are placed pans, *c*, *c*, to contain common rosin, and placed over small pits, *d*, *d*, in which the fire can be made to melt the rosin, atmospheric air being admitted to the fires in these pits through apertures *e*, *e*, in front of the main pans, which apertures are governed by sliding registers in any manner desired. The front and back walls of the kiln have openings, one of each rosin pan provided with vertically-sliding registers, *h*, *h*, suspended each to a chain that passes over a pulley, and having a counter weight hung to it, so that the attendant can, by moving the registers, regulate the admission of air to the inflamed rosin, and thus increase or decrease the combustion as the condition of the kiln may require. Holes provided with plugs may be made in the walls, leading to the main flues, to enable the attendant to examine the condition of flame within the flues.



KILN FOR BURNING POTTERY.—FIG. 74.

After the articles to be baked have been arranged, and the kiln properly prepared for firing, small fires, just sufficient to melt rosin are made in the pits under the rosin pans; common pine rosin, in lumps, is put into the pans, and as it melts, the gas evolved is inflamed by the admission of atmospheric air, which produces flame in such quantity as to pass through all the flues formed by the ware in the kiln, and completely envelope the pottery or articles to be baked.

The intensity of the flame can be increased or decreased, by means of the registers which govern the supply of atmospheric air to the inflammable gas; the greater the supply of air, the more intense the flame, and *vice versâ*. The flame thus produced is so diffused as completely to envelope the articles to be baked from the bottom to the top of the kiln; and so great is the quantity of combustion, or



GROUND PLAN.—FIG. 75.

inflammable matter in the gas thus produced, that the action of the oxygen of the atmospheric air admitted, is entirely cut off from the surface of the articles being baked. Should it be desired to make a kiln very high, atmospheric air may then be admitted through vent holes, near the top, to inflame the gases in the upper part of the kiln; but, in kilns of the size ordinarily used for baking pottery, and other kinds of earthen ware, this will not be necessary, as it has been found, that, with the largest size heretofore used, the flame can be carried even above the top, and give throughout the desired heat to bake equally.—*Farmer and Mechanic.*

GATHERING SEEDS.—The largest seed vessels should be selected, and the seeds gathered as soon as possible after they are ripe, and always on a fair day.

THIRD DUKE OF CAMBRIDGE.

THE cut below is a portrait of the 3d Duke of Cambridge, imported last year, by Colonel J. M. Sherwood, of Auburn, and Mr. A. Stevens, of New York. He was bred by the late Thomas Bates, Esq., of Yorkshire, and is considered one of the best bulls ever brought to America.

He was got by Duke of Northumberland, (1,940,) out of Waterloo 2d, by Belvedere (1,706); out of Waterloo 1st, by Waterloo (2,816); out of Lady Antrim by Waterloo (2,816); out of Anna by Lawnsleeves (365); out of Angelina by Phenomenon (491). See English Herd Book, vol. iv., page 614, No. 5,941.

We think this cut is engraved in superior

THIRD DUKE OF CAMBRIDGE.—PROPERTY OF J. M. SHERWOOD AND A. STEVENS.—FIG. 76.

style; and trust that the animal it so faithfully represents, will leave a numerous and highly improved progeny behind him.

The 3d Duke of Cambridge won the first prize for bulls in aged class of shorthorns, at the show of the New-York State Agricultural Society, held at Syracuse, in September, 1849.

VIRGINIA FARMING.

How to Improve Worn-out Lands.—The great error committed by most Virginia farmers, is, in cultivating too much land in grain, and particularly corn. The corn crop is exhausting. It requires much nutriment from the soil, and frequent stirring of the earth with the plow, the hoe, or the cultivator, which soon exhausts the soil, unless it receives large and frequent supplies of manure, to restore what has been extracted from the soil by the crops taken from it. If a piece of virgin land be cleared and put in corn, and this crop repeated annually for three or four consecutive years, the vegetable matter in the soil is exhausted, and the land is worn down by such an injudicious course. This, although improper and injudicious, is a very common practice. If such land, before a plow is put in it, could receive a dressing of 50 or 100 bushels of lime, or 100 to 200 bushels of marl, and after a crop of corn has been taken from it, succeeded by small grain, and on this crop clover seed sown and permitted to remain on the land two years ungrazed, and then plowed down to be again cropped by corn or wheat, the land never would and never could be worn out, but would be annually improving. Such, I am pleased to say, is becoming the practice of our best farmers, who are already reaping rich harvests by such a course of improvement.

The old three-field system, which has been so injurious to the farmers of our state, is becoming fast into disrepute, and the four and five-field systems are much more generally adopted than formerly. The old three-field system was very ruinous to our lands. The first year, one third of the arable land was put in corn, the next year in wheat, if it would produce it. If too poor for wheat, it was put in rye or oats. The third year, this same field was made a pasture for all the cattle and hogs on the farm, so that at the end of the year, there would not be a spire of grass remaining on the field. Then it was again subjected to the same course of cropping and grazing, without the application of manure, in many instances. And those who made great exertions to make and apply manure, could not raise a quantity anything like sufficient to apply to the large field intended for corn the next year, and consequently, the most industrious and persevering farmer was compelled to cultivate a large portion of his corn crop without any manure. And even such a one saw, by this system, his land deteriorating, or at best at a stand-still.

But I am pleased to say a better system is coming into practice, and our farms are beginning to show the great advantage of a different system. Some adopt the four-shift; one in corn, one in wheat, oats, or rye, and two in clover. This is a beautiful system, and if properly carried into practice, by the aid of lime, marl, and manures, will, in a short time, make the poorest farms present a different aspect. Instead of the bare and naked earth, you will have presented to your sight verdant and luxuriant fields of clover, wheat, or corn. And the farmer, instead of reaping scanty and unprofitable crops, finds that he has to enlarge his granaries and build additional corn cribs.

The five-field system is practised by some farmers. That system taxes the land more severely than the four-field. The custom is to put two fields in wheat, one in corn, and two in clover. Thus three fifths of the farm are in grain, and two fifths in grass. Whereas, in the four-field, only one half of the farm is in grain, and the remaining half in grass. Both systems, however, have their advocates.

Another four-shift plan has been adopted by some of our best farmers, and successfully pursued, for a long period, namely, two fields in wheat, one field in corn, and only one field in clover. Under this plan, there should be no grazing of the fields, and it becomes necessary to have a standing pasture, as it is called, or a piece of land devoted to grass and pasturage.

Any of these systems, however, if well and properly carried out, will result in a rapid and decided renovation of worn-out farms, as they are called. Our farmers have abundant and ample sources from which they can, by a judicious system and an industrious application of the means within their reach, make their poorest fields rich and productive. I can speak more particularly of the advantages of the seaboard where I reside. Here we have marl on or near most farms. If that cannot be had, we have navigable water to our farms, and can procure lime in any quantity. We have an inexhaustible supply of vegetable matter in our woods and on our shores, as well as marsh mud in the greatest abundance. All that is necessary to give new life and vigor to our exhausted lands, is, to make a compost of lime, leaves, and marsh mud, and apply a good dressing before planting in corn, and it will show pretty soon that the farmer did not labor in vain.

In consequence of the great abundance of marl in Eastern Virginia, and the use of it pretty extensively, it is effecting a wonderful improvement, wherever it is applied. Although it does not exist on my farm, except at such a depth as to be inaccessible for agricultural purposes, I have, notwithstanding, used marl with great and decided advantage. Marl, I have obtained from York River, and lime from Baltimore and from Maine. A VIRGINIAN.

Mathews County, Va., June., 1850.

SELECTION OF SEED CORN.—This month seed corn should be selected. It can only be well done in the field, by gathering those ears with small butt-ends, the second ripe, and taken from stalks which have two or more well-filled ears to each. In this way, the best varieties of corn in cultivation have been obtained.

THE SENSE OF SMELL.

INSENSIBLE must be that person who can take a beautiful and fragrant rose into his hand without feeling thankful for so good and perfect a gift. With the most systematical form and color is blended an odor more exquisite than all the arts of the chemist's laboratory could ever imitate, or we enjoy, but for the sense of smell. This lovely flower is a favorite among all people wherever it grows, and is more sought after by civilised man, than any other. Why? Is it because of its beautiful varying tints? No, for other flowers, the dahlia, for instance, in this is more wonderful; but it lacks odor. It gives no pleasure to the sense of smell. It is this sense that gives us a higher degree of enjoyment than the sense of sight. How often have been sung the pleasures of the hay field—the beauties of making hay. Deprive us of the sense of smell, and what should we find there to attract us to the spot and give us pleasure?

The objects about which the sense of smell is constantly employed are as incomprehensible as the other creations of the same power that created these. They are no casual productions, they are given to make man happy if he so wills it. The sense of smell is the poetry of all the senses. It may be cultivated with taste. Our dwellings may abound with sweet flavors as well as pleasing views. Everything that is cultivated to corrupt the sense of smell, should be as carefully excluded from the vicinity of our homes, as things that are offensive to the sight, if we would avoid corrupting the minds of those more than tender plants we are rearing there. Familiarity with corrupt smells will corrupt the taste, and render the sense of smell obtuse to the pleasures always enjoyed by this pleasure-giving faculty in an uncorrupted state. This sense, too, should always be consulted for the benefit of our health. That which is offensive to it, indicates that the salubrity of the atmosphere is affected, and should warn us at once, to remove the cause that is slowly diseasing the human bodies that come within its deleterious influence. But the disease of the body is not so certain as the disease of the mind, that lives within the influence of such vile smells as fill the precincts of some places, some human beings denominate their *home*, a word that should always call up a sacred feeling of love to hear it spoken.

Here is the picture of a "farmer's home" I lately visited. Not five rods from the door there is a duck pond daily stirred up by a dozen dirty swine, filling the air with anything but the scent of roses. At the east end of the house, and directly under the window of the "spare bedroom," stands—What do you think? A rose or lilac, or a bed of flowers, or a climbing honeysuckle, to fill the room with sweet odors, as the morning sunbeams find their way through a curtain of green leaves, charming the sense of smell of those who sleep there, and awakening in their minds a feeling of thankfulness to God, for the gift of smell and odors of flowers that give it gratification? No. Instead of these, the space is filled with hen coops—useful, to be sure—but out of place, and corrupting the atmosphere with a most villainous stench. On the south side of the house, and directly in view of the door of the dining room, and scarcely fifty feet from it, stands a small building, which should always be located far away from the dwelling, and if possible, out of the range of prevailing summer winds, shrouded with evergreens and creeping vines, and kept in such condition by the use of substances that absorb ammonia, and frequent cleanings, that the sense of smell should scarcely be offended by a visit to it, as it now is while partaking of the morning meal. By the side of the back kitchen door, stands the swill barrel, steaming with putrifying buttermilk and bonny clabber; and just three rods off. is the trough and pen where it is fed to the pigs; and immediately in connection with that, the cowyards and stables. On the side opposite the swill barrel, and within three feet of the door, is the spout of the kitchen sink, and an open drain to carry all the dirty suds and slops slowly winding along between overhanging weeds to feed the duck pond first mentioned. The house itself, a one-story, shingle-sided, gambrel-roofed, unpainted structure, with stone chimneys, stands cornerways to the road, and separated from it by a crooked rail fence, and rickety gate, without a single shade tree to hide its hideous nakedness, nor a flower to charm away the offence offered to the sense of smell by all the horrid things surrounding this farmer's home.

Can the inmates of such a house be pure in heart? Does not the mind of man grow upon the food it feeds upon? Can the sense of smell be blunted and save the moral faculties free of contamination? Is it to be wondered at that children, who have such a home as this, whenever their minds become elevated by visits to more pleasing scenes, lose their love for the old birthplace of themselves and their ancestors and wander far away from fatherland, in pursuit of enjoyments that might have been procured at home, only that they have been sickened with everything connected with it that calls up a reminiscense of its offensive sights and smells?

Shall we be told these things cannot be avoided on the farm—that manure must be made, and such objections arise from ridiculous fastidiousness? Truth will answer, the more cleanly the premises, the more free from offense to the sense of smell, the more are the fertilising properties of all offensive substances saved and locked up in fresh mold, charcoal, peat, copperas, tanner's bark, or better still, gypsum, which have been freely used, to keep the air sweet and pure, and concentrate the escaping ammonia in a solid form, to carry to the field, and increase the growing crops to a value ten times greater than all the cost of the substances that in the using have added so much to the pleasures of the farmer's home. Fastidious indeed! Pity it were not more fashionable. If you would make your children coarse and unintellectual beings, rear them in just such a place as I have described; scold them for being too fastidious if they "turn up their noses" at the vile odors surrounding them, and you will succeed in blunting the

sense of smell and every other faculty that distinguishes man from the brute. From the brute? That is a slander upon the delicate sensibility of some of the brute creation, and nice faculty of the sense of smell, which they possess, and which prompts them to avoid locations that none but man, whose sensibilities have been contaminated by long association with filth, would ever think fit for a habitation.

In the case of inferior animals, how wisely this faculty has been adapted to their particular purposes! With what unerring certainty the faithful dog follows the footsteps of his master through the masses of the crowded street or wild jungle of the tangled forest! God gave him the sense of smell, and unlike man, he has not abused it.

The strength of this sense in the blood hound is still more wonderful. Give him but one smell of a cast-off garment of the fugitive to be followed, and he will distinguish his track from all others. The acute intelligence and determination which these animals evince in pursuit of a quarry, is almost indescribable. The fineness of the sense of smell, possessed by the deer, is often of great advantage to the Laplander when travelling over a vast expanse enshrouded in snow. It is only by their smell of the moss, though buried several feet, that they can tell whether the spot chosen to pitch the tent is upon land or water. Many a lost traveller never would have been rescued from his snowy death bed, but for the delicate sense of smell possessed by the convent dogs of the great St. Bernard. Caravans, overwhelmed and lost amidst the desert sands of Africa, have been saved from destruction because the camel possessed and exercised a faculty that man is constantly at work to blunt and destroy—a faculty which, if cultivated, would add greatly to his happiness. Who that possesses a refined sense of smell, though he has spent years upon the ocean wave or city pavements, but feels as though he snuffed the sweet fragrance of the fields and forest flowers, whenever he reads of scenes of country life? How the odors of the orchard fill his nostrils in spring when the mere name of the country tingles upon the sense of hearing. One of the sweetest of his pleasures of memory is the recollection of the odors that made him love the flowers with which God carpeted the earth where he first breathed their sweet fragrance.

> In vain for him the golden morn
> Awaked the song of vernal bird;
> No sight nor sound, emotion gave,
> Like that which fragrance stir'd.

Oh, ye denisens of the country, who might live in the constant enjoyment of Persian gales, how have ye perverted and abused this good gift of God, till ye are enabled to sit down contented to your morning and evening meals in the atmosphere of a duck pond or pig pen, and sleep in the fragrant effluvia of a hen coop, or drown the natural sense of smell, in the horrid stench of burnt tobacco.

S. R.

REVIEW OF THE JULY NUMBER OF THE AGRICULTURIST.

Benefit of Guano.—This article seems to be a plain statement of facts, sufficient to induce owners of "deadly poor" land to apply guano more extensively; and I understand this would be done, but for the price, which is thought to be unreasonably high. I have heard several persons say, in our independent Yankee land, that they would not use it now, however profitable it might be to do so, because it was a "monopoly;" and a monopoly they will not patronise under any circumstances. This may be an independent position to take, but so far as my little experience is concerned, it is not a very profitable one. It is too much like "biting the nose to spite the face." The Peruvian government monopolises its guano in the same sense as our government does the public lands; yet, there is this difference in its management: they sell to the English company for a certain number of years, not only what Great Britain and its dependencies consume, but all that can be disposed of in the United States; whereas, we sell lands to any one who pleases to buy. Now, what I would wish to bring about, is, to induce the Peruvian government to sell directly to any of our citizens who will purchase. We should then no longer have a rich English company lording it over us, to fix just such a price upon guano as they please. The first cost of the article, I understand, is only $10 per ton. Now we have hundreds of vessels returning from California, with little or no freight, which would be glad to load with guano. I am for "free trade and sailors' rights;" so, let these vessels load with guano; we should then have it here in abundance, for $40 per ton, a price which the independent farmers, (sailors, too, for that matter,) of staunch old Connecticut, would not object to. I understand General Taylor was in treaty with the Peruvian government to open a free guano trade, at the time of his decease. It is to be hoped that President Fillmore will follow up the negotiation with effect. I had no idea until recently, that Maryland and Virginia were using such large quantities of guano as they are. I am rejoiced to learn that the planters there are waking up to their true interests, though I must confess that I wish this valuable fertiliser were to be found in our own country. But I hope the necessity of importing it, will teach our farmers the still greater necessity of saving every particle of fertilising substance within their reach, and the most judicious application of it to their crops.

New Way of Raising Pigs.—New, indeed, but why not a good one? It certainly is no advantage for the pigs to run after the sow all day long, and it surely is a very great disadvantage to the sow, to have them continually dragging at her breast, and interfering with her opportunity to graze. No doubt both sow and pigs can be fed to better advantage by themselves.

To Destroy Wild Onions.—Feeding them off with sheep may be the *most* effectual way you have ever tried, but is it *wholly* effectual? If so, it is of the highest importance to some parts of

the United States, where they are so abundant that the cultivated crops are seriously injured. The best plan I have ever tried, is, to freeze them to death, by turning over the ground in the fall and harrowing it several times during the winter.

Pasture Lands.—That such lands should be more productive than those which have been mowed, is not to be wondered at, because the grass fed off by cattle is left upon the soil to enrich it, in their excrements. But it is wonderful when farmers do see such productiveness, that they should ever think of keeping "permanent pastures," or permanent mowing lands in preference to a rotation of grain and grass crops.

The Horses of Siberia.—Interesting as this article may be in a historical point of view, I beg leave to inquire whether an article on the horses of America, would not have been more so? Do we import Siberian horses? or if we should, do so, would you recommend driving them "forty-eight hours under the yoke, without being once baited with feed or drink?" Or, would you recommend us to believe such is the custom in Siberia, or that they travel them "unchanged, a distance of 200 versts," (about 150 miles,) notwithstanding it is so stated in the book? The next time you are in the mood of "talking horse," pray, do not drive us quite so far without food or drink, or else we may kick the traces.

Cultivate a Variety of Crops.—Yes, and to be in the height of fashion, cultivate them in any variety of ways but the right one. If you happen to hear of any one succeeding better than you do, be careful not to adopt his course, because that would be an acknowledgment that your neighbor knows more than you. Stick to your old way if it is wrong; it shows your independence. What is the use of changing from one crop to another, your father did not? He never broke up an old pasture, nor meadow, to plant corn upon the rotting sod. He used to go along the roadside and dig up sods, and haul them into the barnyard, and rot them, and then haul them out into the "old field" to manure corn upon the same ground where he had grown it every year since he was a boy. But now these new-fangled notions would recommend you to grow the sod on the same ground instead of hauling it. The world is full of new notions.

To Promote the Success of County Agricultural Societies.—Good as these suggestions are, I think I can improve upon them. Besides the permanent building, or at any rate, enclosed yards and entrance fee, that every society *must* have to succeed, I would have the annual show, *a fair*, in the old English sense of the word. In the first place, I would charge one dollar membership, which should entitle the member to a year's subscription to any agricultural paper or book that could be had, wholesale, for half a dollar. The other half dollar should entitle the member to a vote to all business meetings, and free admission to the show grounds, and the use of a stall or place where he or she might exhibit or sell any article whatever, suitable to such a place. To make the fair more attractive, and induce visitors to enter and pay the gate fee, I would hire a band of music, some good singers of appropriate songs; and perhaps exhibitors of some attractive and innocent pastimes for the children, and speeches for the old folks; so that it should come to be looked upon, not only as a place to show big bulls and fat pigs, but a real *farmers' fare and festival;* where, for three days, every sort of commodity should be for sale, and every sort of innocent, moralising and mirthful enjoyment had, for a small amount of money, from each visitor, but which would amount in the total, to a large sum, and enable the managers to give some real useful and valuable premiums, worth contending for by the stock or grain grower, or farm improver, or implement maker. What county will first try the experiment? My word for it, that it succeeds.

Cutting and Curing Hay.—I infer from the reading of this article that the writer is of opinion that, unless hay retains its bright-green color, it is nearly unfit for use. Such hay is most salable, but not always the most nutritious, nor palatable to cattle. If hay is put in cock somewhat green, it often undergoes a sweating process, and turns black, without heating or injuring its quality. If it is put in mow or stack in an uncured condition, and salted, it may turn dark-colored, but cattle never refuse it. The quality of hay in market may be judged in the same way that General Taylor used to select sweet corn in Florida, for his own bread or hommony. Among a number of sacks of musty corn, there were a few sweet ones, which were difficult to select, until the "good hard-horse sense" of "old Whitey," was called into requisition. He would poke his nose round among the bags until he found one to suit his taste, which also suited his master's; for instinct taught him to select none but the sweetest. I am not in favor of "early-cut grass for hay;" because my experience has taught me that after it attains a degree of maturity, it is more nutritious. Not, however, if the seed is threshed off as this writer says he did before sending the hay to market.

Adjustable Screw Wrench.—This is just about one of the most useful little farming tools ever purchased for the same amount of money. The name of its uses is legion. It is more easy to tell what it is not useful for, on a farm, than to enumerate all its conveniences. Like almost every other tool, the quality of this has been greatly improved of late, and at the same time the price reduced.

Breaking Rocks with Fire.—The writer thinks it is not generally known that rocks may be easily broken with fire. Perhaps not. Does he know all about it? To break a rock with fire, first make a little furrow across it with a pick, and then build the fire of something that will give the greatest heat, (charcoal is best,) and when red hot, pour water into the furrow. Some rocks will split with very little heat. I have knowr it done by a loose cotton rope dipped in spirits of turpentine and burnt in the furrows.

The Farmer's Home.—Strong as the contrast is drawn in this article, between what the farm-

er's home should be, and what it too often is, it is not half equal to the truth. Is it any wonder that children forsake such an old "shingle palace," or dirty-brick or dismal stone dwelling, that looks more like a prison than a "happy home," and wander away from the land that gave them birth, and never cast one single regret behind? Is it singular that children forsake rather than improve and beautify their home? Where are they taught to love the beauties of art or nature? Certainly not in the "district school house." Look at it, and where it stands. An old dingy, wooden, one-story house, never painted nor underpinned; never fenced, and of course, the hogs always had a nest beneath the floor. Look at the windows. One, two, three old hats stop broken panes; four are patched with paper, and one is filled with a shingle, and five still remain open on the side now in view. There is not a tree, not a shrub, nor a grass plat around it, and it stands in the fork of two dusty roads. The only place of privacy is a few distant bushes, or a rail fence. Here is where farmers' children are educated—taught the beauties of botany, and arts of rural embellishments, by which home is to be made attractive. Yes, just as attractive as the old district school house—attractive of disgust. I pray you, friend Derwin, give us a few more pictures; I will help you embellish them.

Farm of Mr. French.—Many more interesting particulars might have been stated of this extraordinary neat farm. Among other things, I would have opened the interior of his "tool house," for some of your readers to look into, and wonder what on earth a man could do with so many, or how he managed to keep them in such order, and to have a place for everything, and everything always in its place.

"The comforts about the house are such as might be expected." Yes, in a farmer's home; that, is such a home as every American farmer ought to have, and might have under a better system of education and cultivation. Dark and bright pictures improve by contrast. Let us have more of them.

Cultivation of Peaches on Long Island.—The writer says "One reason why peaches have not been cultivated more on this island, is, probably, because the farmers do not understand the treatment they require, &c." Are there not other reasons? One of which is some portion of the farmers of Long Island do not belong to this age of improvements. They are antediluvians—living in their ancient "shingle palaces," cultivating their land just as their fathers did, and honestly believing that all the uncultivated land cannot be cultivated because it never has been."

Economy.—Here is almost a page of matter under this title. What for? Is it an English word? Does anybody understand its meaning? "Teach children economy." Do you think they would be so unfashionable as to practise what Webster's Dictionary defines this word to mean? "The management and government of a family; frugal and judicious use of money?" This is all very good advice, but the tyrant law of fashion will not permit it to be acted upon.

Reclaiming Worn-out Lands without Manure.—The self-congratulations of this farmer that he had been able to keep his land fertile by feeding out all his hay upon the land, without using any foreign manures, is just about equal to a man congratulating himself that he had always been able to carry his grist to mill on horseback, with a stone in one end of the bag to balance the corn, "without the aid of foreign" wagons. Where there is a convenient market for hay, it will probably pay better profits to the farmer to sell it, than any other crop, or feeding it on the fields where grown. Return an equivalent in foreign manures, and your land will not become exhausted. It is not always good economy to feed it all to cattle at home.

How Horses Get the Colic.—The "prevention" recommended in this article may do for Siberia, it never will be practised in this go-a-head country.

A Chapter on Various Subjects, one of which is a "hit" at the "Captain;" in which he is requested to "hold up his head and speak like a man," and give a categorical reason why he "guessed" a certain article was written by a lady. This is the first time I ever heard any surprise expressed because a Yankee *guessed* at anything. I thought they had a prescriptive right to that franchise. But as "Agricola" doubts it, I will only guess once more. I *guess* I cannot answer the question put to me, notwithstanding I have held up my head as desired, and spoken as much like a man as I am able to under the circumstances; as you are aware I am obliged to keep myself always in the dark, lest you should see my ugly face, and then there would be no more guessing who owned it. And now I *guess* I will pass over a great many other articles that enrich this number of the Agriculturist, for fear somebody else besides Agricola will accuse me of "poking jokes" at him, and so poke them back at me, and injure the reputation of your REVIEWER.

FAILURE IN THE CLOVER CROP.

FOR the last half century or more, the commonly-cultivated red clover has often failed in many sections of Europe. This has been attributed to various causes, but principally to the exhaustion of one or more of the ingredients of the soil essential to securing a productive crop. Aelbroeck, in his work called L'Agriculture Practique de la Flandre, has, with no little reason, given the following as the principal cause for its failure:—

He says. "the orobanche, or broom rape, (*O. major, O. vulgaris, L.*) is a parasitical plant; that is, it attaches its roots to those of other plants, instead of fixing them in the ground. The seed of this singular plant vegetates, as usual, in the ground, and the plant grows to some height, when its connection with the ground is broken, and a new root formed and fixed on an adjoining plant. It is mostly found on the roots of clover, hemp, and broom, and most frequently on poor soils. The second crop of clover seems, also, to be more liable to it than the first. Strong clay soils are less subject to the

growth of this parasitical plant than lighter soils, and the clover grown upon them is often so vigorous as to survive any slight evil produced in the first crop, but not always able to do so in the second growth. Dry seasons, (as being most unfavorable to the vigorous growth of the clover plant,) are most favorable to the spread of the broom rape. It appears to be indigenous to Flanders, though it has only attracted attention during the last forty or fifty years. Since that time, it has gradually spread more and more, until, in some parts of that country, very serious injury is done to the clover crop.

Within the last few years, these facts have excited great attention, and several memoirs have been written on the subject. The information they contain is chiefly botanical, so that no further notice of these memoirs can be interesting except to extract the information they contain respecting the destruction of this pest to the farmer, and to suggest such other methods as have been found successful. It is thus shown that the clover may be destroyed by a parasite, having as substantial and bone-fide an existence as the ivy that fastens itself to the decaying elm, or the misletoe on the oak. A remedy has been found by mixing ashes with the clover seed and rubbing closely together between the hands, then stirring in water, and after the clover seed has settled, pour off the floating rape and ashes. Repeat this two or three times.

The dodders are found to be extremely prejudicial to many plants, and the clover among them, constituting, as it does, a parasite to the whole family of the leguminosæ, peas, beas, the clover, &c.

COCHIN-CHINA FOWLS.

Having made inquiry in the December number of the eighth volume of the Agriculturist concerning some reputed peculiarities in Cochin-China fowls, and as no answer has yet appeared in relation thereto, I send the following for publication:—

In the first place, it may be well for me to give the history of my fowls as far as known. The stock from which mine descended, was imported direct from Shanghae, in May, 1847, by Mr. John J. Taylor, of Monmouth county, New Jersey, from whose brother they were procured, who resided in that city two or three years, where they cannot be bought for less than $5 per pair.

As far as I have been able to ascertain, the feathers on the necks of the cocks do not turn upwards, as has been asserted by some; but "the wing is jointed, so that the posterior half can, at pleasure, be doubled up, and brought forward between the anterior half and the body." The general description of this breed appears to agree with that of the queen of England's, as given by Richardson in his Treatise on the Domestic Fowl.

The combs of the cocks are mostly, but not always single, the size, middling, the wattles, thin, fair-sized, legs always yellow, or reddish-yellow, and generally lightly feathered, with the spurs very short and sharp. A pullet procured of Mr. Taylor, in every other respect a perfect resemblance to his imported hen, has no feathers on her legs. The color of the cocks vary from a reddish gold to a red bay. Mine is of a light bay on the breast and thighs, wings beautiful gold and red, neck feathers black, covered with red and gold hackles; back hackle, bright gold, tail, black, which does not appear before five months old. The wings are small and decidedly jointed, so that the end of the wing folds up between the main part of the wing and body, and in the chickens, the end of the feathers frequently show above the body of the wing. When young, the wings often cross each other on the back, and at no age, fold around the body below the tail, as in the common fowl, but incline to meet together on the back. I consider the cock a very compact, well-built, beautifully-colored, handsome bird.

The hens vary but little in shade of color, much resembling, in form, the portrait on p. 35 of Browne's American Poultry Yard, and the description there given of the Cochin-China hen corresponds with mine in color, character, and all, except mine are generally lightly feathered on the legs. They are very meek, motherly-looking hens. The eggs are about the size of those of the common hen, of a reddish color. The chicks, when first hatched, are considerably larger than the common ones.

These fowls are the most hardy, peaceable, quiet, and fonder of home, than any others with which I am acquainted. A flock of fifty or one hundred together forms a beautiful sight. I believe them a distinct breed, because, first, the color never changes, neither do they show now and then a streak of Malay nor any other colored bird. Their color is their own, of which I should call them very tenacious. Second, although Mr. Taylor has bred them in-and-in for four years, they do not, in the least, degenerate. Third, the tail feathers always show at the same age in all the pullets, and although later, in all the cocks of the same age. Now, what two breeds can you find that show the tail at the same age? Certainly, if you cross two breeds together, showing the tail, one at an early age and the other later, the chickens would some show the tail young, and others late. I contend that no new breed can be formed from different bloods, and here, Mr. Bennett, a late writer on poultry, is decidedly in error, in pretending to have formed a Plymouth-Rock breed from Cochin-Chinas, fawn-colored Dorkings, Great Malays, and Wild Indians. They are no breed, but most mixed-up mongrels. I undertook, about six years ago, to form a breed that should resemble each other in form and color. I had about as mixed materials as Mr. Bennett mentions. I succeeded at first very well, producing a beautifully-colored cock of white, gold, red, and black. Each year, the chickens would turn out several cocks resembling the father. Finally, the old cock died, the next oldest I killed, and these two years past, my fowls are all growing white, and the chickens, which at first were large and very thrifty from the cross, have degenerated, become miserably sickly things, hardly worth

raising. I would here refer all concerned, to Browne's American Poultry Yard, for the true principles of breeding, as well as for a great deal other valuable matter.

But, to return to Cochin-Chinas. I procured four pullets and one cock, in August, 1849, all of them quite young. I may here state in proof of their hardiness and good laying qualities, that, from neglect or necessity I kept them in a small open yard, with an old barrel as their only protection, all winter; yet, they did not seem to suffer in the least, from cold, and commenced laying very early, producing, with few exceptions, eggs each day after commencing, which I never had pullets do before. One began to lay January 26th, and continued up to March 1st, producing 30 eggs, when she wanted to sit. I broke her up March 11th. She began to lay again, and produced 41 eggs more up to April 29th. May 11th, she began again and continued until May 29th, laying in all 90 eggs. I then sat her, and she proved a very steady sitter, a good nurse, and a profitable and valuable hen. The second one began to lay January 31st, and laid 20 eggs to February 22d. I then sat her. She hatched her chickens, and without weaning them, began to lay again April 27th —sat again May 20th, hatched nine chicks, raised them, and is now, August 3d, laying again, having produced eggs 10 or 12 days past. The third one began February 1st, and laid until 29th of March, missing some days between, when she wanted to sit. I tried to stop her, which I found no easy matter. She would sit, put her down on the ground, or where I pleased. Finally I gave her a cold-water bath, which seemed to throw her into a fever. She soon after began to lose her feathers, and has not laid since. New feathers have come in, and she has now every appearance of health. The fourth one commenced laying February 9th, producing 80 eggs to July 27th, and wanted to sit six times. I should say that they are good layers, excellent sitters and protectors of the young.

From some cause or other, the first broods did not hatch well; but since, they have done better. One hen, I recollect hatching 15 chicks from 17 eggs. I have had about 80 chickens hatched, and but one of them died of disease. Rats, or some other "varmints" have killed several, biting them through the head and neck. A more hardy, thrifty lot of chickens, I never expect to see. Some one has said they are great eaters. I should say they are great growers, and I never fed stock of any kind with which I was better satisfied with the growth for the food consumed. Will a pure-blooded shorthorn grow finely on light food?

In regard to the weight of these fowls, they are large enough. I do not know that any could be made to reach 15 pounds, but they can be made to weigh between 12 and 15 pounds. The heaviest cock taken from Mr. Taylor's roost in very common flesh, weighed 11¼ pounds; made fat, he would likely reach 13 pounds. The hens, in common flesh, reached 8 pounds. I would put the cocks from 9 to 12, and the hens 7 to 9 pounds.

If any one particularly wishes them, I will spare a few pair this season; but I wish to keep a heavy stock for breeding next year. The price will necessarily be high for four or five years to come, from their scarcity, great demand, high cost of stock, trouble and expense of building separate yards, to keep them pure; and, what I consider of great importance the cost of different stock cocks every year, so as not to breed them to their own pullets.

In breeding, I would recommend that the breeder have as many separate yards as cocks, putting from three to five hens with each cock, and then each year changing the cocks to different yards. The hens, of course, staying at home. By this means, with four or five cocks, the thrift and merits of any particular breed may be kept up for any length of time. The yards must be large and dry.

J. C. Taylor.

Atlantic, Monmouth Co., N. J. Aug. 3d, 1850.

NEW MODE OF BUTTER MAKING—BOILED BUTTER.

We have no disposition to substitute any other product of the dairy, for the deliciously sweet, aromatic butter, so abundantly furnished by our best dairywomen. But as a substitute, greatly preferable, either for luxury, economy, or health, we would exchange the miserable washy stuff, (which is, at first, a tolerable mixture of thick cream and buttermilk, but soon changes to an intolerable mass of rancid grease,) for the boiled butter of Switzerland, according to the subjoined mode of making butter, as given by Dr. Forbes, an intelligent English writer.

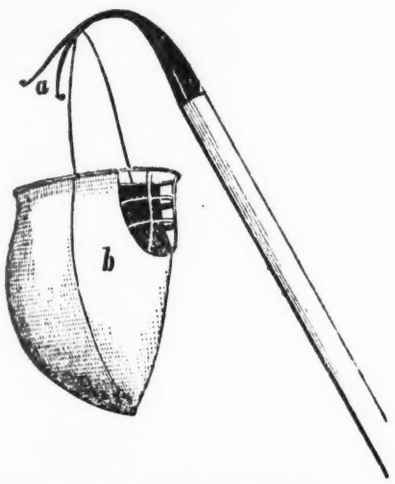
Into a clean copper pan, (better no doubt tinned,) put any quantity of butter, say from 20 to 40 lbs., and place it over a *very* gentle fire, so that the butter may melt slowly; and let the heat be so graduated that the melted mass *shall not come to the boil in less than about two hours.* During all this time, the butter must be frequently stirred, say once in five or ten minutes, so that the mass may be thoroughly intermixed, and the top and bottom change places from time to time. When the melted mass boils, the fire must be so regulated as to keep the butter at a gentle boil, for about two hours more, the stirring being still continued, but not of necessity so frequently as before. The vessel is then to be removed from the fire and set to cool, and settle, still gradually, the process of cooling being supposed to require about two hours. The melted mass is then, while still quite tepid, to be carefully poured into the crock, or jar, in which it is to be kept. In the process of cooling, there is deposited a whitish, cheesy sediment, (proportioned to the quantity of butter,) which is to be carefully prevented from intermixing with the preserved butter. These caseous grounds are very palatable and nutrient; they are constantly used as food. As might be expected, there are some variations in the practice of different individuals. One very experienced man assures me that a much shorter time than two hours need elapse between the setting of the vessel on the fire and the bringing the

butter to the boiling point. Another said that the time should bear some relation to the quantity of material used—an average period of ten minutes being allowed for every pound. The same party told me that if the butter employed was not quite sweet, the addition of a slice of bread and a slice of onion (?) will remove this; also, that the appearance of the grounds rising up to the top when the mass is stirred, is itself a proof that the boiling is sufficient. My guide at Chamouni told me that his wife usually added a small portion of salt to the mass, in the early stage of boiling.

Everybody agreed in asserting that butter, so preserved, will last for years perfectly good, without any particular precautions being taken to keep it from the air, or without the slightest addition of salt. Indeed, I myself tasted, more than once, butter so prepared, fully twelve months after preparation, and found it without the slightest taint. It wanted the flavor of fresh butter, but seemed to me infinitely more palatable than our coarse, salt butter.

NEW FRUIT GATHERER.

This implement consists of a strong canvas bag, *b*, with an iron hoop fastened to the mouth, which is attached to a long handle, or pole, by a wire bail.



Fruit Gatherer.—Fig. 77.

The operation of the instrument is as follows:—The upper end of the pole, to which is attached the bag, is first directed into the head of the tree. Then, by means of the iron fork, *a*, the fruit is detached, which immediately drops into the bag, and is prevented from being bruised by the fall. When the bag is filled, which will contain two or three quarts, it is lowered to the ground, discharged of its contents, and the operation repeated until the tree is divested of its fruit.

An implement of this description, it is obvious, will be of great value to those who have large orchards of fruit, which cannot be easily reached by the hand. Price $1.

Washing Woolen Clothes.—Woolen goods should be washed in very hot suds, but never rinsed. Tepid water causes them to shrink.

MR. ROBINSON'S TOUR.—No. 21.

Virginia Fencing.—This term is generally understood to mean a crooked or worm fence, of split rails. But in some parts of the state, that kind of fence is least common. I noticed in Gloucester county a very good kind that may well be imitated elsewhere. It is made with alternate long and short pannels, of lengths of five and ten feet, six and twelve feet, and three and ten or twelve. I like the last best. It makes a fence so near straight that it takes up but little room, which is a consideration too much lost sight of in good lands.

This fence may be staked and ridered, or staked and capped, if necessary. It is most commonly built upon a bank, as, in fact, are nearly all the fences upon the "low lands" in that and adjoining counties and in the Rappahannock Valley, upon the west side of the river, particularly. This ditching and banking for fence may be very well upon wet lands, but it is often carried to extremes. I have often seen it six or eight feet, and even higher, with sometimes no rails on top, and then it is no fence. Sometimes three or four rails, and then it is about half a fence, and sometimes eight or ten rails, and then it is a good fence; and so it would be if there were no ditch and bank. Where cedar grows, instead of rails, brush is often used, wattled together between stakes and makes a good, durable fence. It will last, with slight repairs, 20 years, if the stakes are of cedar or chestnut, both of which abound in Lower Virginia.

Another kind of wattle fence is made of poles, the stakes being set eight or ten feet apart. There are a few hedges made chiefly of cedar, and is generally a pretty good fence against cattle, except where the trees die, as is often the case, but no barrier against hogs, which *filthy brutes* are still permitted to run in the roads, notwithstanding the great advancement mankind have made in civilisation.

At Hazlewood estate, in Caroline county, the late residence of Colonel John Taylor, the oldest agricultural writer in America, which is now occupied by his heir and namesake, there are miles of cedar hedges, for which the Philadelphia Agricultural Society gave him a gold medal in 1819. It is said that it was then a beautiful and good fence. But, like all tree-growing plants used for hedging, it has overgrown itself. It has been found impossible to keep it trimmed down, and as it increases in height, as a matter of course, nature prunes the lower limbs. The great error, however, in planting this hedge, was, setting it upon a high bank, which has made it more difficult to trim, and keep in order.

There is another farm six miles below Fredricksburg, on the opposite side of the Rappahannock, upon both sides of the road, which looks beautiful at a little distance, but as you approach, you find it full of unsightly gaps and dead trees. Like that at Hazlewood, it was planted upon a bank, and was not trimmed down enough when young. There are a good many other cedar hedges in the state that I have noticed in my travels, none of which are fences.

An excellent fence very common in Virginia,

is made in this manner: A pair of stout cedar, chestnut or locust stakes are set strong, just wide enough apart to admit a large rail between, having a two-inch round tenon upon the top of each, to receive a strong cap, upon which a heavy rail is sometimes laid after the space below is filled up with rails, lapping one upon another, between the stakes. This kind of fence is most commonly built on a ditch bank. In fact, it seems in some districts as though the people have no idea of ever building a fence except they first dig a ditch, whether the land is wet or dry. The best style of fence upon these banks would be palisades, which might be made as follows:—Cut the stuff four feet long, of lasting wood, and split it the size of rails, and sharpen the upper ends; set these in the line of the centre of the bank, and throw the dirt around them. This is done by one hand to put them, one at a time, in place and hold them, while another throws dirt enough around to secure them. They should stand about four inches apart, and project above the top of the bank about two and a half feet. No animal will ever climb over such a fence from the bottom of a ditch, nor *vice versâ*. The fence will be better, if a strip of board is nailed along the face of the stakes, about four inches from the top as that prevents any one piece being removed out of place. Perhaps a wire stretched along and nailed to each stake, would be cheaper than wood strips. This kind of fence will be found to be a very cheap and good one, wherever the owner has, or will dig a ditch. It takes less timber than a rail fence, and will last as long with less repairs. I would recommend gentlemen who are troubled with cattle pushing through hedges, to stretch a wire along through the limbs, or perhaps two of them. Generally speaking, the Virginia fences are very good, and in such abundance that they are a most enormous tax upon industry.

SOLON ROBINSON.

MR. LEWIS G. MORRIS IN ENGLAND.

SINCE Mr. Morris' arrival in England, in May, we have been favored by several letters from him. In his last, dated Exeter, July 24th, he had just witnessed the great Show of the Royal Agricultural Society, with which he was highly pleased. Aside from this, he had often visited Smithfield and Covent-Garden Markets, the two largest for fat stock, and fruits and vegetables, in the kingdom. He was also at the late Mr. Thomas Bates' celebrated sale of stock, where he purchased a few shorthorns, and at Mr. Jonas Webbs' annual sale of Southdowns, at which he bought several of his prime sheep. In addition to these, he has purchased some choice Devons, all of which are daily expected in the United States.

With the exception of passing three weeks in London, he writes us he has been constantly travelling in England, Scotland, and Ireland, examining the husbandry and manufactures of these countries. Several implements which he has seen at work on the farms there, he much admires, but thinks them better fitted for the advanced state of cultivation there, than for the rapid and rather careless manner in which we do things in the United States. However, with proper modifications, he is of opinion that they may be made highly useful in our country, and with this view he will bring over some with him, on his return, to serve as models for our implement manufactory, if we deem them suited to our own country. We wish more of our citizens would go abroad with the laudable objects of Mr. Morris; they would then make tours of benefit to our countrymen, as well as of pleasure to themselves. In thus becoming acquainted, with foreign improvements in agriculture and its implements, and introducing them into practice, on their return, they would add to our wealth and productiveness, and confer a lasting benefit upon their fellows.

RICE THRESHERS.

THE difficulty of threshing rice by machinery, has long prevented the construction of such a machine as would effect the purpose, at a reasonable price. Rice is one of the most obstinate grains to separate from the straw. This is owing to the two-fold obstacle of very brittle straw, which yet holds the grain with a most tenacious grasp. To effect their separation, hitherto, nothing has been found adequate, short of a very expensive machine, costing many hundred dollars, and such could only be afforded on the large and exclusively rice plantations. Recently, however, a much less complicated machine has been patented, which costs less than $100, and requires only the power of the ordinary grain thresher to propel it, and is adapted to all the other small grains, as well as to rice. The introduction of this machine, with a small rice huller, will do much to secure the cultivation of this valuable grain where it has been entirely neglected, and augment the product where it has been an object of minor attention.

CROSSING THE PHEASANT WITH THE DOMESTICATED HEN.—Mr. Dixon, an English author who has recently published a very interesting work on poultry, thus summarily disposes of a popular notion:—I have not met with one authentic fact of the race of pheasants having been really incorporated with fowls, so as to originate a mixed race, capable of continuation with itself, but with many that prove the extreme improbability of such a thing happening. The vulgar notions that hens kept by the sides of plantations therefore become the mothers of half-bred chickens, by which pheasant blood is again transmitted to their progeny, and that hens, whose plumage in some measure resembles that of the cock pheasant, are therefore hybrid individuals, are too vague to be listened to in the absence of clearer evidence, which is not yet forthcoming. But it will not be easy to eradicate this prejudice from the public mind.

KETTLES.—Brass kettles, before using, should be carefully cleansed with salt and vinegar.

Ladies' Department.

TO MAKE NUDLES—AN EXCELLENT SUBSTITUTE FOR VERMICELLI.

Mix a teaspoonful of salt in half a pound of sifted flour; beat the yolks of four eggs, and add the flour, a little at a time, beating until it becomes thick; then flour the pie board, and knead the mass, adding slowly as much flour as it will take up; for the harder the dough, the thinner you can roll it. When you can work in no more flour, roll it with the rolling pin as thin as possible; with a sharp knife, cut it into slips two inches wide, knead the scraps together, and roll and cut them also. Lay these strips neatly one over the other, and cut them across, as fine as vermicelli; then sprinkle some flour over them, to prevent them from sticking together, and put them into the soup half an hour before it is taken up.

This quantity is enough for five quarts of soup. Nudels are best while fresh; but will keep well for several days, if spread thin between the folds of a napkin; but they require to be boiled much longer than when fresh.

M.

ON DRYING PLANTS SO AS TO PRESERVE THEIR COLORS.

No science, perhaps, requires so much practical knowledge as botany; in its study, botanical ramblings and the preservation of gathered specimens are of the greatest assistance. The usual method, however, of drying plants is generally long and troublesome, and, above all, very uncertain. Indeed, whatever quantity of papers is employed to separate the plants, and even if the damp papers are replaced by dry ones every twelve hours, ten days are required before the plants are properly dried, and at the end of that time they are so discolored, and their characters are so altered, that a great deal of practice is requisite to enable one to make them out. I have made several attempts to remedy these inconveniences, and I take the liberty of laying the results before the (French) Academy.

In a botanical excursion, I arrange my plants between sheets of grey paper, which immediately absorbs any free water arising from rain or dew. In this state, the plants can be preserved for 24 hours without alteration. The next day, I place them in very dry paper; then I put them in an apparatus of my own invention, in which they are completely dried in 24 or 30 hours, preserving the color of their leaves and the brilliancy of their flowers.

The following is the theory of my method:—The water of composition and interposition evaporates but slowly in ordinary cases. It, however, struck me that by raising the temperature and diminishing the atmospheric pressure I should probably arrive at a good result. I accordingly made a copper cylinder half a yard high, and two feet in diameter. In this vessel, I placed a packet of papers containing 100 specimens. I then put about 8lbs. of lumps of unslacked lime in the spaces between the paper and the side of the cylinder, and fixed the top of the cylinder on. I then put the whole into a small tub, and raised the temperature to about 125° or 130°F. by means of boiling water poured into the tub. The air is then exhausted from the copper cylinder by means of a small air pump screwed into its lid. I make use of no ananometer, because, at this temperature, as the air is drawn out its place is filled by aqueous vapor, and besides, in such an operation as this, no precision is requisite. The vacuum once made, that is to say, after having pumped at intervals for two or three hours, the apparatus is left to itself for 24 or 30 hours; at the end of this time on opening the apparatus, the plants are found dry and like the specimens I have the honor to lay before the Academy.—*Gannal, in Comptes Rendus.*

A Capital Tomato Recipe.—The following has been handed to us as the recipe of a good housewife for preserving or "curing" tomatoes so effectually that they may be brought out at any time between the seasons "good as new," with precisely the same flavor of the original article. Get sound tomatoes, peel them, and prepare just the same as for cooking; squeeze them as fine as possible, put them into a kettle, bring them to a boil, season with pepper and salt; then put them in stone jugs, taken directly from water in which they, (the jugs,) have been boiled. Seal the jugs immediately, and keep them in a good cool place.—*Exchange.*

To Make Hens Lay.—The South Carolinian says a neighbor states that hog's lard is the best thing that he can find to mix with the dough he gives to his hens. He says that one cut of this fat as large as a walnut, will set a hen to laying immediately after she has been broken up from sitting, and that, by feeding them with the fat occasionally, his hens continue laying through the whole winter.

To Toughen New Earthen Ware.—It is a bad plan to put new earthen ware into boiling-hot water: it should first be plunged into cold water, and placed over a fire where it will heat moderately to the boiling point, and then be permitted to cool again. This process greatly promotes the toughness and durability of common earthen ware, which is generally objectionable for domestic uses on account of its fragility. The glazing on this kind of ware will remain uninjured by the boiling, if a handful of rye or wheat bran be added to the water, and prepare it to withstand successfully, and for a long time, the action of acid or salt.—*Exchange.*

Filling Beds.—Beds should be filled with barley straw in preference to rye, oat, or wheat straw, when obtainable. The husks of Indian corn, carefully selected, and slit into shreds, make an excellent article for beds. They are durable, clean, not very likely to absorb moisture, and are not objectionable on account of making dirt.—*Ibid.*

Foreign Agricultural News.

By the steamer Niagara we are in receipt of our foreign journals to 3d of August.

Markets.—*Cotton* has recovered from the slight depression of the week previous, and was at highest quotation of the month again. *Grain*, in consequence of the fine harvest weather was slightly depressed.

Death of Rev. William Kirby.—We regret to announce the death of the Rev. William Kirby, Rector of Barham, Suffolk, the well-known author of the Introduction to Entomology, written in conjunction with Mr. Spence. He died on the 4th of July, in the 91st year of his age.

Effects of Railroads on Agriculture.—It is stated in a late English paper, that in consequence of the introduction of railroads, the number of horses in England has been reduced from 1,000,000 to 200,000. Now it is computed that it requires as much land to subsist one horse as it does to subsist eight men. Consequently, it would appear that the 800,000 horses displaced by railroads make room for an additional population of 6,400,000.

Potato Disease in Ireland.—I am sorry to learn that disease is again beginning to show itself in Ireland, in the leaf and stalk, as well as in the shape of blotches on the tap roots. This may, perhaps, be the most favorable opportunity that has yet occurred for observing where the true seat of the disease is. Favorable weather, invigorating the vital force, has brought up the plant in the finest apparent condition, above ground. But is the tap root clean and white as it used to be twelve or fourteen years ago? If potato growers generally will ascertain this, with the least convenient delay, and continue their observations until the Royal Agricultural Society's meeting, and be ready to report them there, this great point may be settled. In all my observations since 1845, I do not remember a single case in which the blight appeared above ground before the blotch on the tap root occurred; but many, where the root was blotched and even ulcerated, whilst the plant above ground, remained green and vigorous, so long as it was favored by fine weather.—*J. Prideaux.*

Bran as a Manure for Turnips.—I tried bran, and it failed most completely; the first year it was used in the original dryness, the second year it was steeped in water, and afterwards mixed and dried with quicklime. In both cases, the bulk of bran formed a damp mouldy consistence, in which the seed vegetated, but never pushed beyond the lump, and not one plant ever brairded. Maggots were numerous. The circumstance puzzles me very much, having read the success of bran in Mr. Blackie's Cyclopædia.—*Gardeners' Chronicle.*

The American Churn.—My experience differs so widely from the advertised testimonials, that I am very curious to learn what has been the case with others who have tried the American churn. My dairymaid has had a six-pound churn in use for the last month, perhaps ten or twelve churnings,) under the most favorable circumstances, at 58° or 60°. The butter has never come in less than 17 minutes, usually in about 18, and once it did not come in less than three quarters of an hour; while the advertised testimonials state a much shorter time, namely, from 12 minutes even to 4 minutes.—*Ibid.*

Annual Show of the English Agricultural Society.—This was held at the old city of Exeter, on the 16th 17th, and 18th July. We are in receipt of letters from several of our friends who were present, giving full details of the show; but being of too great length to copy in full, we condense what is most important from them.

Of implements, there were 118 exhibitors, and about $2,000 distributed in prizes for them. The variety of them is much greater than with us; there were some which are not shown at all at our agricultural societies' exhibitions. Among the most important of these were steam engines, fire engines, ditching plows, tile machines, clod crushers, and portable farm railways. A four-horse steam engine on its best trial, threshed out 480 bushels of wheat in a single day, at one fourth the cost of horse labor.

Of cattle, the show was very fine in Herefords, and numerous as to Devons, Exeter being the home of this beautiful breed of animals. In other stock, it was only moderate.

The American ministers to England and France, Messrs. Lawrence and Rives were present, and each made an excellent speech. They were received with great applause. Among other Americans present, we notice Mr. Lewis G. Morris, of Westchester, N. Y., Mr. Taintor, of Hartford, Ct,, and Mr. Gordon, of Virginia.

A Venerable Tortoise.—A large land tortoise has been brought home by the Geyser steam sloop from the Cape of Good Hope, as a present for her Majesty, and was placed in Buckingham Gardens on Monday. The tortoise is in remarkably good health, and during the voyage it took its regular promenades upon deck, making no apparent difference in its walks, although a full-grown person sat on its back. Its age has been handed down in the families in whose possession it remained until sent to this country; and it is thereby known to be 179 years old. It subsisted during the voyage, on pumpkins.—*London Newspaper.*

Coconut Sugar.—Ceylon newspapers mention a new source of sugar, as likely to be of importance to that colony. The sugar is obtained by cutting off the coconut flower stem, attaching a vessel to it, and evaporating the liquid; it flows over in quantities so great as to be almost incredible, and I have seen samples of the sugar equal to anything ever obtained from the sugar cane, and produced in such abundance from a tree as to promise immense returns yearly to the owner of it. Would you kindly state your opinion as to the chances of a tree so bled, living in health any length of time. [A coconut tree comes to full bearing in seven years, and will continue in vigor for 70 to 100 years in Ceylon, producing from 100 to 300 nuts yearly. We should imagine a tree so tapped would live but a very few years].—*Agricultural Gazette.*

Preservation of Green Kidney Beans.—The following is the process employed by M. Gehen de Montigny, for the preservation of green kidney beans:—In fine weather, gather the pods, before the seeds are too visible; take the threads off, plunge the pods in boiling water, and then take them out immediately; let them cool, put them in a tub in layers five inches deep, alternating with vine leaves, which must begin and end the series; on the top of the last layer of vine leaves, put a stone heavy enough to keep the whole well pressed. Then pour in some salt water until the top is covered; replace the water as it evaporates. The beans can thus be preserved quite fresh.—*Flore des Serres.*

Root Pruning.—Pear trees, which are three or four inches in diameter, a few inches from the ground, and growing luxuriantly, should have a trench opened round them about 4½ feet from the stem, and as deep as the roots go. Cut all very strong roots, which are going down into the subsoil, with a strong chisel; and, in filling the trench, add some fresh, turfy loam. Let the ground round the tree be thoroughly watered a few hours before the trench is opened; this will soften the soil, and very much facilitate the operation.—*Gardeners' Chronicle.*

Editors' Table.

TIME OF HOLDING ANNUAL FAIRS.—The following shows the times and places the principal fairs are to be held in the United States:—

New-York State Agricultural Society, at Albany, September 3, 4, 5, 6.

Massachusetts Charitable and Mechanics' Association, at Boston, September 11.

Ohio State Fair, at Cincinnati, September 11, 12, 13.

American Pomological Congress, the same time and place as the last named above.

Maryland State Fair, at Baltimore, October 23, 24, 25.

Michigan State Fair, at Ann Arbor, September 25, 26, 27.

Rhode-Island State Fair, at Providence, September 18, 19, 20.

New-Hampshire State Fair, at Concord, first week in October.

Canada-West Annual Fair, at Niagara, September 18, 19, 20.

Fair of the American Institute, city of New York, commencing the 1st of October, and continues for three weeks. Plowing and Spading Matches, at Tarrytown, October 11. Cattle Show, corner of 5th Avenue and 23d streets, October 16, 17, 18.

AN IMPORTED DURHAM BULL.—When we visited the beatiful place of Lorillard Spencer Esq., at Westchester, last month, among other things we had the pleasure of examining there, we noted a fine Durham bull recently brought over from England by Captain Morgan, in the ship Southampton. This bull is a rich strawberry roan, past a year old, large of his age, and a hardy animal. We have no doubt he will prove of great benefit to the stock of the country. We are very glad to see gentlemen of the good taste of Mr. Spencer, engaged in the importation and breeding of fine stock, and we trust that others in his neighborhood, who can so well afford the luxury, will make haste to copy his praiseworthy example. Westchester was the foremost county in this state to engage in the improvement of stock, its first importation having been made by Mr. Heaton as early as 1791. We trust the good old county will continue to keep up to its ancient renown.

IMPORTATION OF ALDERNEY CATTLE.—Nine cows and one bull arrived here on the 17th of August, in the ship Splendid, from Havre. They were selected from the best stock in the Isle of Jersey, by Mr. John A. Taintor, of Hartford, Ct., and are designed for himself, and Mr. Daniel Buck, Jr., of the same place. This breed of cattle is famous for their rich milk, it averaging, usually, from 20 to 25 per cent. of cream. We shall make a visit to Mr. Taintor soon, and will then give a full account of this stock. Suffice it for the present to add, that they are genuine, thorough-bred Alderneys, and look something like, and are about as handsome as a jenny, or female ass.

AN IMPORTATION OF SIX ALPACAS from Peru, has just been received at this port, by the steamer Cherokee. We understand they were intended as a present for the late General Taylor, but that two are now to be presented to Mr. Webster. The remainder, (one of which has just died from confinement in his close city quarters,) have another destination. They will admirably suit the Honorable Senator's Granite-Hill Farm in New Hampshire, but are ill adapted to his low, sea-girt acres, at Marshfield.

TRANSACTIONS OF THE NEW-YORK STATE AGRICULTURAL SOCIETY, FOR 1849.—This yearly document, so much sought after and read by so large a number of our readers, is quite as voluminous, and as handsomely illustrated as in the years preceding. It is replete with useful matter interesting to the farmers of this, as well as of all the United States, particularly as it contains the entire lectures of Professor James F. W. Johnston, "On the General Relations which Science bears to Practical Agriculture," as delivered before said Society in January last. We are happy to announce that these lectures are about to be published by C. M. Saxton, of this city, with Notes, a work which doubtless may be read with profit and advantage by every farmer and planter in the Union.

GREAT HAY CROP.—Mr. R. L. Colt, of Paterson, N. J., informs us that he cut 47,560 lbs. of hay in July from 6¼ acres, and he thinks he could now cut about 6,000 lbs. more, as a second crop. This is about equal to Mr. Clapp's great crop, mentioned at page 242 of our last number; 7 acres and 100 rods there gave 29 tons and 497 lbs.

COTTON GRASSHOPPER.—A planter in this neighborhood informed us, a day or two since, that immense quantities of variously-colored grasshoppers are depredating on the cotton fields south and east of this place. Such an irruption has never been known before. The ravages of the insect are represented as being seriously destructive.—*Chambers' Tribune* (*Lafayette, Ala.*)

VALUE OF THE BANANA AS HUMAN FOOD.—It is doubted by Baron Humboldt whether there is any other plant on the globe, which, in so small a space of ground can produce so great a mass of nutriment. Eight or nine months after the sucker has been inserted in the earth, the banana begins to form its clusters, and the fruit may be gathered in less than a year. A spot of 1,076 square feet may contain at least from 30 to 40 plants, which, in the space of a year, at a very moderate calculation, will yield more than 4,410 lbs. avoirdupois, of nutritive substance. The produce of the banana is to that of wheat as 133 to 1, and to that of potatoes as 44 to 1.

NEW PROCESS OF MILKING.—The India-rubber man has got hold of the cow's udder at last. He seems to lay hold of everything with an almost universal grasp. We have seen *Knapp's patent cow milker*, which is to be clapped on each of the teats separately, and by drawing a young piston from the sack, enclosing the teat, Presto! down comes the milk incontinently, till the whole strippings are drawn.

We opine this operation is akin to the straw milkers, so much in vogue among experimenters a few years since. The difference is, that the rubbers cost $4 each, while the straw costs nothing but the cutting; but the former does not injure the teat, while the latter produces irritation and sores. The similarity will probably be found in their mutual worthlessness.

SINGULAR AMALGAMATION.—A friend left at our office a few days since, what may be considered, so far as our knowledge extends, a production peculiar to Minesota. It was a grub worm, apparently of the ordinary species, from the head of which had sprouted a plant some three inches in length. Both animal and vegetable life had become extinct, when we first saw it, though vitality, clearly existed in each, when taken out of the ground. We understand that this species of production is not uncommon in the vicinity of Point Douglass, where this was found. The weeds springing from the head of the worm grow to the height of two or three feet, the legs of the insect meantime distending themselves into the earth in the shape of roots. Animal life remains apparent until the vegetable shoot, above ground, is killed by a change of season; but whether a crop of grubs is produced in the way of seeds, we are not advised. What can't we grow in Minesota?—*St. Paul* (*Min.*) *Chronicle.* [Who believes this? We do not.—EDS.]

Review of the Market.

PRICES CURRENT IN NEW YORK, AUGUST 14, 1850.

ASHES, Pot,	℔	100 lbs.	$6.12	@	$6.19
Pearl,	"	do.	6.00	"	6.12
BALE ROPE,	"	lb.	9	"	11
BARK, Quercitron,	"	ton.	39.00	"	41.00
BEANS, White	"	bushel.	75	"	1.25
BEESWAX, American, Yellow,	"	lb.	20	"	26
BOLT ROPE,	"	"	10	"	11
BONES, Ground,	"	bushel.	45	"	55
BRISTLES, American,	"	lb.	25	"	65
BUTTER, Table,	"	"	15	"	25
Shipping	"	"	9	"	15
CANDLES, Mould, Tallow,	"	"	10	"	13
Sperm	"	"	25	"	47
Stearine	"	"	25	"	30
CHEESE,	"	"	5	"	10
COAL, Anthracite	2,000	lbs.	5.00	"	6.00
CORDAGE, American	"	lb.	11	"	13
COTTON,	"	"	10	"	15
COTTON BAGGING, Am. hemp,	"	yard.	15	"	16
FEATHERS,	"	lb.	27	"	35
FLAX, American	"	"	8	"	9
FLOUR, Ordinary,	"	bbl.	4.25	"	5.75
Fancy	"	"	6.00	"	6.50
Richmond City Mills,	"	"	6.50	"	6.75
Buckwheat	"	"	—	"	—
Rye	"	"	2.75	"	3.00
GRAIN—Wheat, Western,	"	bushel.	1.00	"	1.40
" Red and Mixed,	"	"	80	"	1.00
Rye,	"	"	62	"	64
Corn, Northern,	"	"	63	"	66
" Southern,	"	"	59	"	63
Barley,	"	"	60	"	65
Oats,	"	"	39	"	45
GUANO, Peruvian	2,000	lbs.	50.00	"	50.00
Patagonian,	"	do.	35.00	"	40.00
HAY, in Bales,	"	100 lbs.	50	"	60
HEMP, Russia, Clean,	"	ton.	200.00	"	205.00
American, Water-rotted,	"	"	160.00	"	200.00
" Dew-rotted,	"	"	140.00	"	175.00
HIDES, Southern, Dry,	"	"	9	"	10½
HOPS,	"	lb.	6	"	18
HORNS,	"	100.	2.00	"	10.00
LEAD, Pig,	"	100 lbs.	4,38	"	4.75
Pipes for Pumps, &c.,	"	lb.	5	"	7
MEAL, Corn	"	bbl.	2.75	"	3.25
MOLASSES, New-Orleans	"	gallon.	23	"	30
MUSTARD, American,	"	lb.	7	"	10
NAVAL STORES—Tar,	"	bbl.	1.50	"	1.75
Pitch,	"	"	1.25	"	1.75
Rosin,	"	"	1.25	"	1.30
Turpentine,	"	"	2.44	"	2.75
Spirits of Turpentine,	"	gallon.	30	"	33
OIL, Linseed, American,	"	"	73	"	77
Castor,	"	"	1.60	"	1.75
Lard,	"	"	58	"	65
OIL CAKE,	"	100 lbs.	1.25	"	1.50
PEAS, Field,	"	bushel.	75	"	1.25
Black-eyed	"	2 "	2.00	"	2.25
PLASTER OF PARIS,	"	ton.	2.00	"	2.75
Ground, in Barrels of	300	lbs.	1.12	"	1.25
PROVISIONS—Beef, Mess,	℔	bbl.	8.00	"	10.00
" Prime,	"	"	5.00	"	7.50
" Smoked,	"	lb.	6	"	12
" Rounds, in Pickle	"		4	"	6
Pork, Mess,	℔	bbl.	10.00	"	12.00
" Prime,	"	"	6.50	"	10.00
Lard,	"	lb.	6	"	7
Bacon Sides, Smoked,	"	"	3	"	4½
" in Pickle,	"	"	3	"	4
Hams, Smoked,	"	"	5	"	9
" Pickled,	"	"	4	"	7
Shoulders, Smoked,	"	"	4	"	6
" Pickled,	"	"	3	"	5
RICE,	"	100 lbs.	2.25	"	3.75
SALT,	"	sack.	1,25	"	1.60
" Common,	"	bushel.	20	"	35
SEEDS—Clover,	"	lb.	6½	"	9
Timothy,	"	bushel.	2.00	"	3.50
Flax, Clean,	"	"	1.60	"	1.65
SODA, Ash, (80 per cent. soda,)	"	lb.	3	"	—
Sulphate Soda, Ground,	"	"	1	"	—
SUGAR, New-Orleans,	"	"	5	"	7
SUMACH, American,	"	ton.	35.00	"	37.00
TALLOW,	"	lb.	6	"	7
TOBACCO,	"	"	3	"	11
Eastern, Seed-leaf,	"	"	15	"	20
Florida Wrappers,	"	"	15	"	60
WHISKEY, American,	"	gallon.	25	"	27
WOOLS, Saxony,	"	lb.	40	"	60
Merino,	"	"	35	"	40
Grade Merino,	"	"	30	"	35
Common,	"	"	20	"	30

NEW-YORK CATTLE MARKET.

At Market.—2,000 beef cattle 1,400 southern, balance state; 8,300 sheep and lambs, 100 cows and calves.

Beeves.—The market has been rather heavy, with sales at $6 to $7.50 per cwt.. closing dull; 500 head unsold.

Cows and Calves.—The sales of the past week have not been very brisk; prices have ranged at $20 to $40, at which the market has been swept clean.

Sheep and Lambs.—Market quite active, and our quotations fully supported. Sheep have brought $1.50 to $4.50; lambs sold quick at $1 to $3; unsold, 300. August 13.

REMARKS.—No change of any moment in the market since our last.

The Weather has continued very fine since our last. Corn, roots, and grass are growing rapidly, and promise abundant crops. Wheat and all the small grains have generally been well secured, and turn out better than was anticipated. Cotton, Rice, Sugar, Hemp, and Tobacco are doing well.

TO CORRESPONDENTS.—Communications have been received from T. B. Miner, D. J. Fluker, L. Durand, F. J. L., Edward Egan, and Thomas B. Coursey.

ACKNOWLEDGMENTS.—Journal of the New-Brunswick, (N. B.,) Society for the Encouragement of Agriculture, Home Manufactures, and Commerce throughout the Province, instituted at Fredericton, Aug. 30th, 1849; also the List of Premiums of the Cayuga-County Agricultural and Horticultural Society, for 1850, from J. B. Dill, Esq.

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Hertford, N. C., July 16, 1850. sept. 2t*

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BONE DUST—of superior quality, in barrels.
PLASTER.—Ground Plaster, in barrels.
POUDRETTE—at manufacturers' prices.

FOREIGN SEEDS, of superior quality and late importation.
GRASS SEEDS.—Ray Grass, Lucern, and White Dutch Clover Seeds.
GARDEN SEEDS.—A large stock selected with care, expressly for the American Market.

ALLEN'S IMPROVED PORTABLE RAILroad Horse Power, Thresher, and Separator.—The advantages of the above horse powers are—1. They occupy but little more space than a horse. 2. They can be moved by the weight of the horse only, by placing the machine at an angle of 10 or 15 degrees. 3. They are easily transported, simply constructed, not liable to get out of order, and move with little friction.

The Overshot Threshers consist of a small-spiked cylinder with a concave top, and possess these advantages. 1. They have a level table for feeding, thus enabling the tenders to stand erect, and control the motions of the horse and machine by means of a brake, by which accidents are avoided. 2. In consequence of the spikes lifting the straw and doing the work on the top, stones, blocks, &c., drop at the end of the table, and are not carried between the spikes. 3. The overshot cylinder does not scatter the grain but throws it within three feet of the machine. 4. This arrangement also admits of attaching a *separator* high enough from the floor or ground to allow all the grain to fall through it, while the straw is deposited by itself in the best condition for binding. 5. Neither grain nor straw are broken by this machine. 6. The cylinder is long, which admits of faster and more advantageous feeding; it is smaller and with fewer teeth than ordinary threshers, thus admitting of more rapid motion and faster work with less power; and the diminution of teeth in the cylinder is fully made up by an increased number in the concave top, which is stationary. 7. The separator is a great advantage in diminishing the labor of raking out the straw, as it leaves the grain in the best condition for the fanning mill. Three men with a single power, can thresh 100 to 150 bushels of wheat or rye per day; and four men with a double power, twice that quantity. All the above are compact and can be carried where wanted, complete, or they may be readily taken apart and packed for distant transportation by wagon or otherwise.

Price of single Power,	$80
" " Thresher,	$28
" Separator and fixtures,	$7
" Bands for driving, etc.,	$5 to $10
" Wood-sawing machine, complete, and in running order,	$35
Price of Double Power,	$100
" with Thresher, Separator, &c.,	$140 to $150

All the above are sold singly or together, as desired, and are warranted to work well and give satisfacion.
A. B. ALLEN & CO., 189 and 191 Water st., N. Y.

BRICK MACHINES of the best construction, will make 10,000 to 15,000 bricks per day by hand.

GRAIN MILLS.—Steel and Cast-Iron Mills at $6 to $25, and Burr-Stone at $75 to $250, for Horse or Steam Power.

CHURNS.—Rotary and Thermometer Churns, and Self-acting Cheese Presses.

GRINDSTONES on Friction Rollers, requiring one person only to hold and turn.

SAWING MACHINES, for cross cutting cord wood, or slitting Scantling, Plank, or Boards.

ROCK SALT, a valuable article for stock, which does not waste by exposure in the field.

PUMPS.—Suction and Forcing Pumps of all sizes with pipe, at lowest manufacturers' prices.

CORN AND COB CRUSHERS, of different varieties, efficient and durable both for hand and horse power.

RICE THRESHERS, suitable for large or small Plantations, and adapted to Wheat, Rye, Barley, and Oats.

WHEELBARROWS, Canal and Coal Barrows, of various kinds and sizes.

GRAIN DRILL for sowing seven rows at a single operation, which it does with perfect accuracy at any required depth. Price $100.

STRAW CUTTERS of every approved pattern and size, for hay, straw, corn and cane stalks.

CORNSHELLERS.—Several new styles recently made, together with all the old and most popular kinds.

SAUSAGE CUTTERS AND STUFFERS.—These will save nine tenths of the labor in cutting sausage, or other mince meat.

ENDLESS-CHAIN PUMPS of all sizes, to be furnished complete, or in either of their parts, both in large and small quantities.

FRUIT GATHERER.—A new, convenient, and economical article suited to gathering every description of fruit. Price $1 each.

HIGHLY IMPROVED FORCING PUMP and Garden and Fire Engine, a better and cheaper article than ever before offered in the New York, or any other market, to be sold in any quantity.

NEW AND HIGHLY IMPROVED LACtometers.—We have just got up a new article of cream gauge, far better and more accurate than any heretofore made. Price $5, with a liberal discount to dealers.

CHEAP SOUTHERN PLOWS.—Nos. 10¼, 11½, 12, 14, 15, and every variety, including several new and highly popular kinds, for sale in large quantities.

MOWING MACHINES.—These have been tried in this neighborhood, and found to work well, on smooth land. Price $150.

GARDEN IMPLEMENTS.—Superior Cast-steel Shovels, Spades, and Spading Forks, Weeding Hoes, Scufflers; also, Rakes, Trowels, and Hand Cultivators. This last implement facilitates garden operations greatly.

EAGLE PLOWS.—Many plows having been sold under the name of the *Eagle Plow*, which are not genuine, this is to give notice that all plows sold in this city under that name, to ensure confidence, will have our name marked on the beam, and no others purchased here, can be relied on as genuine without this brand.

☞ Be *particular*, also, as to the *name*, *number*, and *street*, which should be
A. B. ALLEN & CO., 189 and 191, Water st., New York.